

REPORT

GROUND WATER MONITORING RESULTS

February, March and April 2008

Shieldalloy Metallurgical Corporation

Newfield, New Jersey



Prepared by



November 2008





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NARRATIVE

1.0 INTRODUCTION

This report summarizes and evaluates the ground water treatment system operational history and analytical results of ground water samples collected at the Shieldalloy Metallurgical Corporation (SMC) Newfield, New Jersey facility during sampling events from February, March and April 2008. The February and March ground water samples and water level measurements were collected on February 21, 2008 and March 18 and 19, 2008, respectively. The April ground water samples and water level measurements were collected on April 22, 23 and 24, 2008. The February and March sampling rounds represent monthly sampling events and the April sampling represents an annual sampling event, according to the revised schedule of August 19, 1991. The objective of the revised sampling schedule is to focus on the toe and perimeter of the chromium plume.

The Supplemental Offsite Ground Water Investigation was conducted between November 2006 and January 2007, with the results detailed in TRC's <u>Draft Ground Water Operable Unit 1 (OU1)</u> <u>Design Report</u> dated February 2007. This investigation included the installation of thirteen vertical ground water profiling sample locations (five discrete ground water samples per location) downgradient of both the Farm Parcel and Lacroce Property. The results of the Supplemental Offsite Ground Water Investigation allow for a more detailed evaluation of the contaminant trends, particularly with regard to the TCE, total chromium and hexavalent chromium concentrations. The key results of the Supplemental Offsite Ground Water Investigation have been incorporated into the following discussion.

1.1 GROUND WATER TREATMENT SYSTEM OPERATION

The ground water extraction well operational data including monthly well log reports of pumping rates and a summary of well downtime for the months of February, March and April 2008 are included in Appendix A. A separate summary of extraction well downtime is included in Table A-1. Also included on the monthly well log reports are a summary of the daily and monthly total pumpage per extraction well and the total monthly pumpage for the entire extraction system in gallons. The extraction system pumped monthly total gallons of 10,398,600 gallons in February 2008; 9,193,080 gallons in March 2008; and 11,079,660 gallons in April 2008. A total of 30,671,340 gallons of ground water were pumped and treated during the February 2008 – April 2008 time period, which is an approximate 5.4% increase from the previous three-month period.

Extraction well downtimes for February, March and April 2008 are summarized in Table A-1. During February, March and April 2008 there were shutdowns of both the entire treatment system and individual extraction wells. The timing and duration of the shutdowns for each of the wells varied, with downtimes lasting from a few days to several weeks. The main reason for the shutdowns this quarter included problems with the electrochemical cell plates and media filter.

Secondary problems involved periodic air compressor shutdowns and repairing the polymer pump. These problems resulted in an overall general reduction of the treatment plant capacity.

Extraction wells RW6S and RW6D experienced the majority of the shutdowns this quarter, however individual shutdowns of RW6D were much less frequent between February 2008 and April 2008 than the previous quarter (November 2008 through January 2008). Extraction wells Layne and RIW2 did not experience significant individual shutdowns during the February, March and April 2008 timeframe. Extraction well W9 remained offline through April 2008, as it has since approximately early February 2007, due to the current limited capacity of the treatment facility. Given the location of W9 (i.e., center of the on-site plume) and the fact that back pressure in the W9 pipeline had been causing electrical problems, W9 is the most logical extraction well to take offline. The pipelines from W9 to the treatment facility will need to be jetted to address the back pressure issue. In addition, once all five electric-chemical cells are operational, extraction well W9 will be brought back online and the design capacity will be restored. It should be noted that various updates and modifications to the treatment system are currently being evaluated and implemented to bring the treatment plant back up to the designed capacity.

A summary of the total monthly tonnage of sludge produced from the treatment plant filter press and shipped offsite during the months of February 2008 through April 2008 is presented in Appendix A (Table A-2). A total of 30.28 residual tons was produced by the SMC treatment facility and received by the Gloucester County Solid Waste Complex (facility #0816A) during the quarter ending April 2008. A total of 79.50 residual tons of sludge were generated and disposed of in 2007. This was an increase in waste production of approximately 7.3% from the previous year (2006). A total of 30.28 residual tons of sludge have been generated and disposed of to date in 2008. The total monthly tonnage will continue to be summarized in future quarterly ground water reports.

1.2 GROUND WATER FLOW CONDITIONS

Well locations, including USGS observation well OBS-2A (NJ-WRD 15-0372), are shown on Figure 1. A summary of the annual April 2008 water level measurements, corresponding water level elevations, and well construction specifications are provided in Table 1. Water elevation contour maps for shallow and deep monitoring wells are included as Figures 2 and 3, respectively. An evaluation of the shallow well contour map indicates a general water table gradient toward the southwest across the SMC facility and the offsite Farm Parcel. A slight water table mound appears to be present in the far eastern end of the facility, in the vicinity of the Storage Yard. However, the full extent of the mound cannot be determined due to the limited monitoring well network in this area of the eastern property boundary. Shallow well contours in the vicinity of the Layne extraction well do not indicate a significant ground water capture zone from this well. This may be due, in part, to the effluent/stormwater retention basin located to the east of the extraction well. Another possible explanation is that the Layne pumping rate has been reduced somewhat over the last several years (i.e., from approximately 50 to 32 gpm). However, it should be noted that a review of historic shallow well contours from 1990 through 1998, prior to the construction of the retention basin and reduction in the pumping rate in the Layne

extraction well, indicate that this area has not typically exhibited a significant ground water capture zone. In contrast, shallow well contours in the area between shallow extraction wells RW6S and RIW2 do exhibit ground water capture represented by curved contour lines. The average pumping rate of RW6S decreased (approximately 84.6%) during this quarter (i.e., from 10.0 to 1.54 gpm). The decrease in the average pumping rate of RW6S was due to the significant amount of time the extraction well was shutdown between February and April 2008.

An evaluation of the deep well contour map indicates a general hydraulic gradient to the southwest similar to the shallow well map. As previously mentioned, beginning in February 2007, and continuing through April 2008, extraction well W9 has been offline due to the current limited capacity of the treatment system. Therefore, there has been no indication of deep ground water capture in this area during this time period. However, just to the southwest of W9, the ground water capture zone in the deep portion of the aquifer in the vicinity of RW6D is well established. A fairly significant cone of depression, some 500 feet in diameter, has historically been present in the vicinity of RW6D. The average pumping rate of RW6D increased (approximately 29.9%) during this quarter (i.e., from 38.5 to 50.0 gpm). The increase in the average pumping rate of RW6D was due to the diminished amount of time the extraction well was shutdown between February and April 2008 when compared to the previous 3-month period. In addition, there is evidence of hydraulic influence on the deep wells located on the Farm Parcel, particularly wells SC2D(R) and SC5D, from the pumping of extraction well RIW2. Although RIW2 is screened from 30 to 55 feet below ground surface (ftbgs), it apparently is pumped at a high enough rate (172 to 187 gpm) resulting in upward vertical leakage from the deeper portion of the aquifer and producing hydraulic capture of ground water beneath the bottom of the well screen. More supporting evidence to this conclusion is presented below. During early February 2007, a new, higher capacity submersible pump was installed in RIW2 resulting in an increase in the instantaneous and average pumping rate of this well. The average pumping rate of RIW2 increased (approximately 8.4%) during this quarter (i.e., from 146.1 to 158.4 gpm).

1.3 GROUND WATER SAMPLING RESULTS/DISCUSSION

Samples for the February, March and April 2008 sampling events were collected by TRC personnel in accordance with the updated sampling and analysis plan: <u>Ground Water Sampling and Analysis Plan – RCRA Monitoring Wells</u>, prepared by TRC, December 2005. Samples will be collected in accordance with this plan during all future ground water monitoring events at the SMC facility.

The well samples and plant influent and effluent samples collected during the February, March and April 2008 sampling events were analyzed by Accutest Laboratories, Dayton, NJ (NJ ID#12129). Electronic data deliverables (EDDs) have been provided by Accutest for the analytical results. New Jersey Department of Environmental Protection (NJDEP) HAZSITE formatted EDDs for the February, March and April 2008 sampling events are attached to this report.

The on-site and offsite ground water analytical results for the February, March and April 2008 sampling events are provided in Tables 2, 3, 4A and 4B, respectively.

As requested by Paragraph 5(g) of the NJDEP's September 16, 1991 letter, the following monthly ground water results are noted from the past quarter (February through April 2008):

Well	Cr ⁺⁶ (ppm)	CrTot (ppm)	Sampling Event
SC1S	<0.01	<0.01	2/2008
	< 0.01	<0.01	3/2008
	< 0.01	< 0.01	4/2008
SC1D	< 0.01	< 0.01	2/2008
	< 0.01	<0.01	3/2008
	< 0.01	<0.01	4/2008
SC2D(R)	11.4	11.4	2/2008
	10.7	11.2	3/2008
	9.90	11.7	4/2008
SC3S	< 0.01	<0.01	2/2008
	< 0.01	<0.01	3/2008
	< 0.01	< 0.01	4/2008
SC3D(R)	< 0.01	<0.01	2/2008
	< 0.01	< 0.01	3/2008
	< 0.01	<0.01	4/2008
SC5D	1.30	1.35	2/2008
	1.30	1.27	3/2008
	1.40	1.55	4/2008
IW1	<0.01	<0.01	2/2008
	<0.01	<0.01	3/2008
	<0.01	<0.01	4/2008

Total chromium has been analyzed in upgradient monitoring well SC25S as directed by the NJDEP's letter dated September 14, 1992. The total chromium results from this well during the last quarter (November 2007 through January 2008) are as follows:

Date	Total Chromium (ppm)
2/2008	0.015
3/2008	< 0.01
4/2008	<0.01

The total chromium results from well SC25S during the past three sampling events (February through April 2008), as indicated in Tables 2, 3 and 4A, are consistent with the historical results for this well (ranging from less than 0.01 to 0.05 ppm) which are below the total chromium ground water action level specified in the September 1996 Record of Decision (ROD) of 0.1 ppm. Since this well is located hydraulically upgradient of the SMC site, the low levels of total

chromium in this well appear to be representative of background conditions. As a result, SMC formally requests that this well be sampled on a quarterly basis rather than on a monthly basis.

Total and hexavalent chromium results from downgradient well SC24D during the past three sampling events have been consistently <0.010 ppm which is comparable to previous results (Tables 2, 3 and 4B).

The deep monitoring well (SC30D) located south of the SMC facility, within the City of Vineland's right-of-way on East Arbor Avenue, was installed as part of SMC's 2002 Offsite Investigation. Well SC30D, which has been sampled quarterly since July 2002, has not historically exhibited levels of VOCs, with the exception of tetrachloroethylene (PCE), or total chromium above ground water action levels. During July 2002, a low concentration (0.6 parts per billion) of PCE, a solvent not historically used by SMC, was detected in this well. The New Jersey Ground Water Quality Standard (GWQS) for PCE is 0.4 ppb. For the next 2 years (October 2002 through October 2004), PCE was sporadically present in SC30D (i.e., October 2002 and October 2003) at levels slightly above the GWQS. However, since January 2005, the detected concentration of PCE in monitoring well SC30D has consistently been slightly above its associated GWQS, with concentrations ranging from 0.47 to 1.3 ppb. As indicated on Table 4B, the April 2008 results exhibited PCE at a concentration of 0.50 ppb. It should be emphasized that PCE was not used in the manufacturing activities at SMC and due to other known industrial facilities (e.g., car wash, Andrews Glass site, Wheaton Glass site, etc.) that have been or are currently being investigated by the NJDEP for chlorinated VOC contamination, the potential exists for other source area(s) to be contributing to the PCE and TCE contamination. Specifically, the potential exists for source area(s) to be located upgradient of the Farm Parcel but downgradient of the SMC manufacturing parcel. Furthermore, hexavalent chromium (Cr⁺⁶) has not been detected above the laboratory detection limit in SC30D during any sampling event. Total chromium has only been sporadically detected above the laboratory reporting limit at levels less than 10 ppb. No detectable concentrations of total or hexavalent chromium were present in monitoring well SC30D during April 2008.

Monitoring well SC31D, also installed as part of the 2002 Offsite Investigation, is located in the northwest corner of the Farm Parcel. Well SC31D has been sampled quarterly since July 2002 and has historically exhibited trichloroethene (TCE) at levels ranging from 2.6 to 20.1 ppb. The detected level of TCE in April 2008 was 9.5 ppb (Table 4B). It also should be noted that in April 2005, PCE was detected for the first time in well SC31D at a concentration of 1.6 ppb. Since the April 2005 sampling event, PCE has been consistently detected above the associated GWQS of 0.4 ppb at concentrations ranging from 0.9 to 2.6 ppb. The detected level of PCE in SC31D during April 2008 was 1.5 ppb. Total chromium and Cr⁺⁶ have not been detected above the laboratory detection limit in this well during any sampling event, including April 2008.

Deep monitoring well SC32D, located approximately 3,200 feet south of the Farm Parcel on West Forest Grove Road, was installed as a "sentinel" well as part of the Supplemental Offsite Ground Water Investigation in December 2006. The details of that investigation are presented in TRC's <u>Draft Ground Water Operable Unit 1 (OU1) Design Report</u> dated February 2007. The newly installed monitoring well was sampled for the first time in January 2007. No detectable

levels of VOCs, total chromium or Cr⁺⁶ were detected in SC32D during January 2007. In July 2007, monitoring well SC32D did not exhibit detectable concentrations of total chromium or Cr⁺⁶. However, a low estimated concentration of toluene (a common laboratory contaminant) of 0.40 ppb was detected in SC32D during July 2007. In fact, the trip blank associated with this sample delivery group (TB072507A) also exhibited toluene at a concentration of 0.79 ppb indicating laboratory contamination was responsible for the presence of toluene. No other VOCs or VOC tentatively identified compounds (TICs) were detected during July 2007. In October 2007, monitoring well SC32D exhibited two VOC TICs (i.e., carbon disulfide and an unknown TIC) at a total estimated concentration of 13.2 ppb. No other VOCs or VOC TICs were detected during October 2007 and once again SC32D did not exhibit detectable concentrations of total chromium or Cr⁺⁶. During the January and April 2008 sampling events no detectable concentrations of VOCs, total chromium or Cr⁺⁶ were present in SC32D (Table 4B). This monitoring well will continue to be sampled on a quarterly basis.

It should be noted that monitoring well SC13S, which is located in the southeast portion of the SMC site downgradient of the NRC-regulated Storage Yard, was damaged and rendered unusable sometime between the April and July 2007 sampling events. This well will be properly abandoned and a replacement well installed by a New Jersey-licensed well driller in the near future.

A summary of the TCE, total chromium and Cr^{+6} results during the past three sampling events (February through April 2008), for each of the on-site and offsite wells, are provided in Tables 5A and 5B, respectively.

This report encompasses the results of two monthly and one annual sampling event. Attached to this report are isopleth maps of the TCE, total chromium and Cr^{+6} ground water plumes from the annual April 2008 sampling event. Figures 4 and 5 represent the TCE isopleth maps for the shallow and deep wells, respectively. PCE concentrations are also illustrated on these figures. Total chromium isopleth maps for the shallow and deep wells are presented on Figures 6 and 7, respectively. The shallow and deep Cr^{+6} plumes are depicted on Figures 8 and 9, respectively. Furthermore, line graphs and histograms representing historical contaminant trends in select shallow and deep monitoring and extraction wells have been provided in Figures 10 through 20. In addition, the key results of the two Offsite Ground Water Investigations (2002 and 2006) have been incorporated into the following discussion.

Comparison of the April 2008 isopleth maps to previous years (April) isopleth maps and an evaluation of TCE and total chromium concentration trends during the past several years have provided the following observations for the shallow and deep ground water plumes.

• The overall footprint of the shallow on-site TCE plume (i.e., 1 ppb contour line) has remained virtually unchanged over the last 7 years, indicating that the shallow plume has been contained by the ground water extraction system and has not spread downgradient of the SMC Manufacturing Parcel (Figure 4). The upward TCE concentration trend in monitoring well K reversed in July 2003 as a result of a sharp drop in the TCE concentration from 46 to 8 ppb. Since July 2003, the

concentration of TCE in monitoring well K has exhibited a general downward trend with concentrations decreasing from 8 to 3.8 ppb (July 2005). Following July 2005, the concentration of TCE in monitoring well K has been relatively consistent, ranging between 1.0 and 2.5 ppb. The detected concentration of TCE in well K during April 2008 was 1.6 ppb. Within the leading edge of the shallow TCE plume, located on the Farm Parcel, monitoring well SC1S had exhibited sporadically low or non-detect levels of TCE from April 2001 to October 2004. Between January 2005 and July 2006, the detected levels of TCE were consistently slightly above the associated GWQS of 1 ppb, ranging between 1.3 to 2.1 ppb. Since July 2006, the concentration of TCE in SC1S has consistently been below the associated GWQS with concentrations ranging from 0.44 ppb to 0.74 ppb. The detected concentration of TCE in SC1S during April 2008 was 0.48 ppb. The low levels of TCE detected in SC1S since October 2001 mirror the levels exhibited in SC3S (with a two-year lag period), located approximately 350 feet upgradient of SC1S. Although it appears that the Farm Parcel's shallow TCE plume has migrated beyond the capture zone of RIW2, ground water fate and transport modeling presented in TRC's Draft Ground Water OU1 Design Report indicates that the shallow aquifer TCE particle pathlines terminate into the Hudson Branch further downgradient. The results of the 2006 Supplemental Offsite Ground Water Investigation seem to support these modeling results. None of the shallow aguifer (i.e., less than approximately 35 ftbgs) vertical ground water profiling sample locations installed as part of the offsite investigation, including those nearest to the Farm Parcel, exhibited elevated concentrations of TCE (i.e., greater than 1 ppb). Figure 10 illustrates the TCE concentrations in shallow wells K, SC1S and SC3S.

On-site deep well A has exhibited fluctuating levels of TCE since April 2001, with spiked levels during July 2002 and January 2005. However, monitoring well A exhibited an overall downward TCE concentration trend from 34 ppb (April 2001) to a non-detect level (April, July and October 2006). Between October 2006 and January 2008 the detected level of TCE has remained relatively low with concentrations ranging from 0.21 to 3 ppb. In April 2008 well A once again exhibited a non-detect level of TCE. TCE concentrations detected in deep wells on the Farm Parcel have exhibited a fairly substantial decrease over the last 13 years. For example, as illustrated on Figure 11, monitoring wells SC5D and SC24D have exhibited a consistent decrease in TCE levels from 359 ppb and 150 ppb, respectively, in April 1995 to 2.5 ppb and 5.4 ppb, respectively, in April 2008. Similarly, as shown on Figure 12, between April 2001 and October 2004, the concentration of TCE in deep well SC2D(R) exhibited a general downward trend (decreasing from 25 ppb to 3.3 ppb). Between January 2005 and January 2008, the level of TCE in SC2D(R) remained consistent, ranging between 3.2 and 4.6 ppb. The concentration of TCE in SC2D(R) increased slightly to 5.8 ppb in April 2008. The addition of well SC31D in the northwest corner of the Farm Parcel has provided better delineation of the deep TCE plume in this area of the parcel. From the initial sampling of SC31D in July 2002 through January 2005,

the TCE concentration trend also generally decreased. Since January 2005, the TCE concentration has fluctuated from 2.6 ppb in January 2005 to 20.1 ppb in January 2008. During the most recent sampling event (April 2008), TCE was detected at a concentration of 9.5 ppb. It should be noted that in recent years, PCE has also been detected in each of these offsite wells (i.e., SC5D, SC24D, SC2D(R) and SC31D). TCE is a first order breakdown byproduct of PCE. Due to the fact that PCE was not historically used in the manufacturing processes at the SMC facility and the close proximity of these wells to other known industrial facilities (e.g., car wash, Andrews Glass site, Wheaton Glass site, etc.) that have or are currently being investigated by the NJDEP for chlorinated VOC contamination, the potential exists for the downgradient PCE and TCE contamination to be originating from source area(s) upgradient of the Farm Parcel but downgradient of the SMC facility. For example, the New Jersey Department of Environmental Protection has filed a civil action against the current and past property owners of the "Andrews Glass" site for natural resources damages to ground water and for other monetary restitution including ground water remediation. This site is located at 3740 Northwest Boulevard, Vineland, New Jersey immediately west (downgradient) of the SMC Manufacturing parcel and north-northeast (upgradient) of the RW6S and RW6D ground water extraction well pair. The civil action was filed in December 2004 for the illegal discharge of various chlorinated VOCs (i.e.; PCE, TCE and 1,2-Dichloroethene (1,2-DCE)) which have been identified in the on-site soil and on-site and offsite ground water. The only deep monitoring well on the Farm Parcel that has not exhibited a downward trend in TCE is SC1D, which has generally shown fluctuating TCE concentrations between 5 and 11.4 ppb. The detected concentration of TCE in monitoring well SC1D increased to 10.6 ppb during April 2008. representing the historic TCE trends of these deep wells is provided as Figure 12. In addition, the results of the 2006 Supplemental Offsite Ground Water Investigation indicated the presence of TCE in the deep portion of the aquifer as far as one mile downgradient of the Farm Parcel. However, several of the offsite ground water investigation sample locations, including those adjacent to and significantly downgradient of the Farm Parcel, exhibited PCE, both in association with and independent of levels of TCE. Once again, this is a strong indication that other potential source area(s) not associated with SMC are contributing to the offsite VOC contaminant plume.

• Based on quarterly ground water monitoring results, the overall footprint of the shallow total chromium plume (i.e., 100 ppb contour line) has remained virtually unchanged over the last 7 years (Figure 6). Similarly, concentrations of total chromium within the center of the shallow plume, with the exception of IWC2, have remained fairly constant over the same time period. From April 2001 through April 2008, the concentration of total chromium in shallow monitoring well SC12S has generally exhibited a downward trend. Although upward trends and spikes (e.g., January 2002 and April 2004) have occurred, overall the concentration of total chromium in SC12S has decreased from 1,200 (April 2001)

to 134 ppb (April 2008). Monitoring well IWC2 exhibited a downward trend from April 2001 through July 2003, prior to spiking to 1,790 ppb by January 2004. Between January 2004 and April 2006 the concentration fluctuated, but remained somewhat elevated, ranging from 1,140 to 1,790 ppb. Since April 2006 monitoring well IWC2 has exhibited a decreasing trend, reaching a low concentration of 819 ppb in January 2008. The total chromium concentration in IWC2 was 1,000 ppb in April 2008. It is possible that the two spikes in total chromium detected in SC12S during the late 2001/early 2002 and mid 2004 time periods have migrated the approximately 875 feet downgradient to the IWC2 well location. Since April 2001, well L has exhibited cyclic upward and downward trends in the total chromium levels. Generally, the highest total chromium concentrations in well L are detected during January and the lowest concentrations are found during July. However, in April 2007 the highest total chromium concentration in 6 years was detected in well L (2,330 ppb). During July 2007, the detected concentration of total chromium in well L returned to historically observed levels (368 ppb), followed by a second, higher spike in October 2007 (2,920 ppb). In January 2008 (484 ppb) and April 2008 (425 ppb) the concentrations of total chromium were once again in line with historically observed levels. At this time, it is uncertain why the spikes in total chromium occurred during April and October 2007, but it could possibly be related to the turbidity of the samples. For example, the field measured turbidity in October 2007 was 150 nephelometric turbidity units (NTUs) while the measured turbidity in January 2008 was only 7.1 NTUs. An accurate turbidity reading could not be collected during April 2008 due to equipment malfunctions. TRC will continue to closely monitor this well, including the turbidity, during future sampling events. Downgradient well SC3S has consistently exhibited total chromium concentrations below laboratory detection limits, including the February, March and April 2008 sampling events. Figure 13 represents the trends of total chromium levels for these shallow wells. The results of the 2002 and 2006 Offsite Ground Water Investigations indicate that the horizontal extent of the shallow total chromium plume is more irregularly shaped than previously thought. Portions of the plume were found to be extending both south-southeast of the Farm Parcel, in the vicinity of West Arbor Avenue, and south of the Lacroce Property to approximately Strawberry Avenue. The irregular shape of the plume is likely related to significant ground water diversions (e.g., irrigation wells, municipal wells, etc.) influencing the plume. As discussed in more detail below, the presence of total chromium at these supplemental offsite investigation locations may be an artifact of the drilling technique (screened augers) as opposed to being actually dissolved in the ground water. Furthermore, the Cr⁺⁶ plume seems to be restricted to an area extending from the SMC facility to the Farm Parcel. Total chromium being removed from the shallow aquifer by the shallow extraction wells (i.e., RIW2, RW6S and Layne) has exhibited modestly changing trends since April 2001. Specifically, total chromium levels have, in spite of minor increasing and decreasing trends, consistently ranged from 1,340 to 1,800 ppb in RIW2 with a slight upward trend since October 2005. Layne has exhibited

total chromium concentrations ranging from 918 to 1,800 ppb with a slight upward trend since January 2005. Prior to July 2007, well RW6S has exhibited total chromium generally ranging from 293 to 697 ppb with slightly varying upward and downward trends since April 2001. In July 2007, the detected concentration of total chromium in RW6S spiked to 1,550 ppb, which was the highest detected concentration in the previous 6.25 years and an approximate 2.7 fold increase from the previous quarterly sampling event (April 2007). October 2007, the concentration of total chromium in extraction well RW6S returned to historically observed levels (758 ppb). In January 2008 the concentration of total chromium in RW6S once again spiked to 1,370 ppb. It should be noted that the spikes in total chromium observed in both the Layne and RW6S extraction wells during the January 2006 sampling event, as well as the spike in RW6S during the July 2007 and January 2008 sampling events, may have resulted from these wells being shutdown at the time of sampling. It is possible that the chemistry of the residual water in the sample tap piping may have been affected, resulting in the anomalously high total chromium concentrations. As a result, the extraction wells (both on-site and offsite) will only be sampled if the individual well is online during the sampling event. In April 2008, extraction RW6S was offline and therefore no sample was submitted for laboratory analysis. Figure 14 provides the 7-year historic trends of total chromium in these shallow extraction wells.

The overall footprint of the on-site deep total chromium plume (i.e., 100 ppb contour line), as well as concentrations within the center of the plume, have reduced significantly over the last 3 years. This change is due, in large part, to discontinuing the sampling of monitoring well SC22D as part of the updated Ground Water Sampling and Analysis Plan – RCRA Monitoring Wells prepared by TRC in January 2006. Monitoring well SC22D was damaged during insitu pilot testing in 2001, and to account for the loss of SC22D, the sampling of monitoring well MWH-4 was initiated. As a result, monitoring well MWH-4, located approximately 40 feet downgradient of SC22D and screened at a similar depth interval (119 to 129 feet), is now sampled on a quarterly basis. The total chromium concentrations detected from well MWH-4, historically and since quarterly sampling was initiated in January 2006, indicate significantly lower concentrations than the levels detected in SC22D. The total chromium concentration in MWH-4 during April 2008 was 1,570 ppb (1,810 ppb in duplicate sample). In addition, Cr⁺⁶ concentrations from monitoring well MWH-4 have been in line with historic levels, particularly in terms of the total chromium to Cr⁺⁶ ratio (i.e., approximately 1:1). Concentrations of total chromium from other wells located within the center of the deep plume beneath the southwest corner of the SMC facility (i.e., wells A and IWC5) have remained consistent with historic trends. Specifically, well A has shown somewhat varied results, with moderate upward and downward total chromium trends from April 2001 through April 2008. An overall decreasing trend has been present from July 2005 through the present April 2008. Well IWC5 has remained fairly constant since

April 2001, with the exception of July 2003 when the concentration decreased sharply, with total chromium levels ranging from 222 to 345 ppb (Figure 15). Although, total chromium concentrations within the A and IWC5 monitoring wells have been in line with historical results, the fact that concentrations in MWH-4 are significantly lower than the concentrations detected in SC22D, has caused both the footprint and the center of the deep total chromium plume to be altered significantly as depicted in Figure 7.

- The southwest lobe (Farm Parcel) of the deep total chromium plume has exhibited fairly significant changes over the last several years. For example, well IW2 on the Farm Parcel has exhibited a substantial reduction in the level of total chromium over the last 14 years (from 22,750 ppb in April 1994 to 5,550 ppb in January 2008), as indicated in Figure 16. However, in contrast, well SC2D(R) has exhibited a fairly substantial increase in total chromium concentrations since April 2001 (from less than 100 ppb to 11,400 ppb in April 2002). Between April 2002 and September 2006 the concentration has generally fluctuated between moderate upward and downward trends, with an upward trend prior to spiking in October 2006, as indicated in Figure 17. The October 2006 concentration (27,500 ppb) represents an approximately 2.7 fold increase from the previous monthly sampling event. This significant increase may be related to the migration of the total chromium plume approximately 310 feet from the upgradient SC4D well, screened from 110 to 120 feet, to the downgradient SC2D(R) location. Elevated total chromium levels (i.e., as high as 37,000 ppb) were detected in SC4D between 1994 and 1999, before returning to pre-1994 levels (i.e., generally ranging between 10,000 and 13,000 ppb). It is possible that the slug of elevated total chromium levels that migrated through SC4D during the mid to late 1990's reached the SC2D(R) location in October 2006. However, in the 18 months since October 2006 (November 2006 through April 2008) the total chromium results from monitoring well SC2D(R) indicate a return to levels comparable to those observed in the six months prior to the October 2006 spike, with small-scale fluctuating increasing and decreasing trends. This could indicate that either the slug has not yet reached the SC2D(R) location or that, due to varying seasonal ground water flow directions, only a portion of the slug had reached the SC2D(R) location in October 2006. The general increase in total chromium concentrations observed in SC5D (located side gradient to SC2D(R) and detailed below) during the last several years to 1,550 ppb in April 2008 provide further evidence for at least a portion of the total chromium plume reaching the SC2D(R) location. Historic results indicate that total and hexavalent chromium have not been detected in SC3D(R) or any other deep monitoring wells downgradient of extraction well RIW2 (i.e., SC1D, SC24D and SC31D). This trend continued in April 2008 and is an important finding as described in more detail below.
- During the period from April 2002 through April 2003, the concentration of total chromium in deep monitoring well SC5D exhibited a fairly substantial decrease (from 3,300 to 301 ppb). From April 2003 through July 2005, the concentration

of total chromium in SC5D remained relatively constant ranging from 249 to 418 ppb. Between July 2005 and August 2006, the total chromium concentration in SC5D fluctuated, exhibiting relatively short duration increasing and decreasing trends. Since August 2006, the concentration of total chromium in SC5D has shown a moderate increasing trend. This provides further evidence of the movement of the higher concentration core of the deep total chromium plume to the SC5D and SC2D(R) area. In addition, as indicated in Figure 18, between approximately March 1996 and October 2002 the levels of total chromium in this well exhibited significant variation between sampling events (ranging between greater than 3,000 to less than 100 ppb). It is difficult to determine the cause(s) of these large fluctuations but it is possible that since SC5D is located toward the "flank" of the southwest lobe of the plume, slight variations in seasonal ground water flow directions could have been responsible for these large fluctuations in total chromium concentrations.

- Well SC28D, located south of the SMC facility, had exhibited a downward trend in total chromium levels from April 2001 through October 2001 (310 ppb to 114 ppb), but again increased to a level of 399 ppb in January 2002. Between January 2002 and July 2005, the concentration of total chromium in SC28D generally decreased, reaching a low of 96.1 ppb in July 2005. From July 2005 through October 2006, the concentration of total chromium exhibited a general increase with a detected concentration of 203 ppb in October 2006. However, the concentration of total chromium in SC28D then showed another consistent decreasing trend between October 2006 and January 2008. A reversal of this trend was observed in April 2008 with a slight increase in the total chromium concentration to 175 ppb (Figure 19).
- Previous pumping tests were performed on extraction well RIW2 by Dan Raviv Associates, Inc. (DRAI) in 1989 (presented in their April 1990 report) and by TRC in 1997. The results of both tests indicate that by pumping RIW2, a direct hydraulic influence was observed in deep monitoring wells SC1D, SC2D, SC3D and/or SC5D suggesting an upward vertical leakage present in the deep aquifer. This data in combination with the fate and transport analysis provided in the same DRAI report, which estimated a chromium plume migration velocity of 110 feet per year, suggests that extraction well RIW2 appears to be effective in capturing the deep chromium plume.
- Although it appears that the pumping of extraction well RIW2 has been effective in capturing the deep Cr⁺⁶ plume in the vicinity of the Farm Parcel, the 2006 Supplemental Offsite Ground Water Investigation has provided an expanded understanding of both the horizontal and vertical extent of the total chromium plume. Based on the results of this investigation, the horizontal extent of the total chromium plume was found to be of an irregular shape. The irregular shape is likely related to significant ground water diversions (e.g., irrigation wells, municipal wells, etc.) influencing the plume. Similar to the shallow total

chromium plume, it appears that a deeper lobe of the plume extends south across the Lacroce Property (i.e., in the vicinity of Strawberry Avenue), as well as a relatively short distance south-southeast of the Farm Parcel (i.e., in the vicinity of West Arbor Avenue). Furthermore, it appears that the total chromium plume extends vertically to the aquifer confining layer (i.e., clay layer) approximately 135 to 145 ftbgs. None of the vertical ground water profiling locations exhibited elevated total chromium concentrations in the deep portion of the aquifer downgradient (i.e., southwest) of the Farm Parcel and extraction well RIW2. In addition, none of the offsite vertical ground water profiling locations exhibited elevated levels of Cr⁺⁶, indicating that the Cr⁺⁶ plume is also being contained by the extraction well system. Furthermore, geochemical data suggests that the natural aquifer conditions would tend to reduce Cr⁺⁶ to the less soluble and mobile trivalent chromium (Cr⁺³). This is supported by the fact that no Cr⁺⁶ was detected at any of the vertical profiling locations during the 2002 and 2006 offsite ground water investigations. Therefore, it is possible that the total chromium detected at the offsite locations is an artifact of the drilling technique (i.e., hollowstem screened auger) rather than representative of dissolved ground water quality.

Total chromium being removed from the deep aquifer by the deep extraction wells (i.e., W9 and RW6D) has fluctuated in well RW6D (levels fluctuating between 1,620 and 6,600 ppb) and in W9 (levels fluctuating between 1,450 to 29,500 ppb) over the course of the past 7 years (April 2001 through April 2008). Both wells exhibited a spike in the levels of total chromium during October 2002. Since the October 2002 spike, the level of total chromium detected in RW6D has remained fairly constant, ranging from 1,620 to 4,530 ppb. However, total chromium in extraction well W9 had exhibited a downward trend from April 2004 through July 2006 (7,900 to 1,510 ppb), prior to spiking in October 2006 (6,880 ppb). The concentration of total chromium in W9 since the October 2006 sampling event has decreased to a pre-October 2006 concentration of 1,560 ppb in July 2007. This fluctuation may be due, in part, to a period of inconsistent pumping in W9 (i.e., reduced pumping rate, followed by an increase and subsequent reduction) between January 2006 and July 2007. In August 2006, W9 was redeveloped to reduce corrosive build-up within the well screen, submersible pump and discharge piping that had been limiting flow. Following the redevelopment process, the extraction wells, especially W9, pumped more efficiently. Therefore, it appears that the increase in total chromium in W9 corresponds to the increased rate at which the well was being pumped. However, since early February 2007, extraction well W9 has only been online sporadically due to the current limited capacity of the treatment plant. This has likely resulted in the decrease in total chromium observed during the April and July 2007 sampling events. No samples have been collected since October 2007 (including April 2008) because the W9 extraction well has been offline and there has been no residual water present in the sample tap piping. Also, as previously mentioned, the individual extraction wells will only be sampled during future

sampling events if they are online. Total chromium levels from April 2001 through January 2008 for the deep extraction wells are presented in Figure 20.

TABLE 1 SHIELDALLOY METALLURGICAL CORPORATION NEWFIELD, NJ GROUND WATER ELEVATIONS / WELL CONSTRUCTION SPECIFICATIONS April 2008

		INSTALLATION			TOP OF INNER CASING ELEVATION (msl)	TOTAL WELL	SCREENED	SCREENED INTERVAL	DEPTH TO	GROUND WATER
WELL#	PERMIT #	DATE	/DIAMETER	(msl) ⁽²⁾	(2)	DEPTH (ft) (3)	INTERVAL (ft) (3)	ELEVATION (msl) (1) (2)	WATER (ft)	ELEVATION (msl) (2)
A	51-142	1970	STEEL/2"	-	94.82	124	114 to 124	-21.18 to -31.18	5.75	89.07
IWC3	51-222	1/74	STEEL/2"	-	97.83	60	55 to 60	40.83 to 35.83	7.62	90.21
IWC4	51-223	1/74	STEEL/2"	-	98.61	80	75 to 80	21.61 to 16.61	8.40	90.21
IWC5	51-224	1/74	STEEL/2"	-	98.03	100	95 to 100	1.03 to -3.97	7.85	90.18
W3D	31-25759	12/5/86	PVC/4" PVC/4"	•	108.37 104.58	108 75	88 to 108	18.37 to -1.63	16.16	92.21
W-4 MWH-4	51-219 UNK	5/8/74 2/7/2002	PVC/6"	97.54	99.44	129	55 to 75 119 to 129	47.58 to 27.58 -21.46 to -31.46	15.15 9.52	89.43 89.92
SC-12D	31-35226-0	11/28/90	PVC/4"	102.16	103.19	140	126 to 136	-23.84 to -33.84	11.75	91.44
SC-13D	31-35227-8	11/29/90	PVC/4"	99.67	101.99	140.5	127 to 137	-27.33 to -37.33	10.88	91.11
SC-20D	31-38187	1/10/92	PVC/4"	101.55	104.53	139	. 129 to 139	-27.45 to -37.45	14.03	90.50
SC-22D	31-35222-7	11/21/90	PVC/4"	96.18	98.72	125	111 to 121	-14.82 to -24.82	8.50	90.22
SC-1D	31-21619-6	5/30/84	PVC/2"	88.00	90.90	115	85-95/100-115	3 to -7 / -12 to -27	8.21	82.69
SC-2D(r)	31-38194	1/3/92	PVC/4"	90.62	92.70	- '	106 to 116	-15.38 to -25.38	7.90	84.80
SC-3D(r) SC-4D	31-38195 31-21690-1	1/7/92 6/8/84	PVC/4" PVC/2"	88.75	91.06 92.64	120	102 to 112 110 to 120	-13.25 to -23.25 -19.36 to -29.36	7.09	83.97
SC-5D	31-21876-8	6/12/84	PVC/2"	_	97.00	120	90 to 120	5.00 to -25.00	7.89 12.43	84.75 84.57
SC-6D	31-21878-4	6/26/84	PVC/2"		94.38	125	110 to 120	-17.62 to -27.62	11.01	83.37
SC-10D	31-23370	11/12/85	PVC/4"	-	95.72	125	105 to 125	-11.28 to -31.28	7.71	88.01
SC-17D	31-35223-5	11/27/90	PVC/4"	106,48	108.07	153	143 to 153	-36.52 to -46.52	19.28	88.79
SC-18D	31-35228-6	11/20/90	PVC/4*	93.56	96.01	130	119 to 129	-25.44 to -35.44	9.67	86.34
SC-19D	31-35221-9	11/26/90	PVC/4"	89.65	92.03	133	120 to 130	-30.35 to -40.35	5.51	86.52
SC-21D	31-35220-1	11/27/90	PVC/4"	90.44	91.65	140	125 to 135	-34.56 to -44.56	5.88	85.77
SC-24D SC-26D	3142083 31-39500	8/24/93 7/9/1992	PVC/4" PVC/4"	100.68	93.52 100.45	115 143	105 to 115 127 to 137	-13.48 to -23.48 -26.32 to -36.32	10.12	83.40
IW-2	31-39300	11/12/85	PVC/6"	100.00	91.05	70	40 to 70	49.05 to 19.05	10.79 7.97	89.66 83.08
SC-28D	31-47408	8/16/95	PVC/4*	107.41	106.87	153	133 to 153	-25.59 to -45.59	19.06	87.81
SC-29D	31-47409	2/20/97	PVC/4*	106.50	106.23	148	128 to 148	-21.50 to -41.50	NM	NM
SC-30D	31-63686	6/14/02	PVC/2"	114,59	115.58	157	147 to 157	-32.41 to -42.41	27.45	88.13
SC-31D	31-66758	6/25/02	PVC/2"	99.78	102.61	130	120 to 130	-20.22 to -30.22	18.98	83.63
SC-32D *	35-27314	12/18/06	PVC/2*	100.00	90.00	102	92 to 102	-2.00 to -12.00	10.90	79.10
OBS-2A ^	31-06092	-	-	120.00	122.80	154	129 to 149	-8.20 to -28.20	NM	NM
В	51-143	1970	STEEL/2"	_	94.33	46	36 to 46	56.33 to 46.33	5.19	89.14
K	51-152	1971	STEEL/2"	-	99.18	46	36 to 46	61.18 to 51.18	10.08	89.10
L	51-153	1971	STEEL/2*	-	103.51	52	42 to 52	59.51 to 49.51	12.15	91.36
IWC1	51-220	1/74	STEEL/2"	-	98.13	20	15 to 20	81.13 to 76.13	7.93	90.20
WC2	51-221 31-38189	1/74	STEEL/2" PVC/4"	-	98.51	40	35 to 40	61.51 to 56.51	8.31	90.20
W2(r) SC-9S	31-23368-6	12/20/91 8/1/85	PVC/4"	95.88	97.96 96.23	17 30	2 to 17 15 to 30	93.88 to 78.88 79.23 to 64.23	5.76	92.20
SC-11S(r)	31-39512	7/1/92	PVC/4"	106.91	108.12	24	9 to 24	97.91 to 82.91	6.97 15.75	89.26 92.37
SC-12S	31-29140-6	9/2/88	PVC/2"	-	104.76	25	15 to 25	87.76 to 77.76	12.75	92.01
SC-13S ⁶	31-29570-3	9/9/88	PVC/2"	-	101,41	24.7	14.7 to 24.7	84.71 to 74.71	NM	NM
SC-14S	31-35215-4	11/15/90	PVC/4"	105.83	108.38	27	12 to 27	93.83 to 78.83	16.20	92.18
SC-15S	31-35216-2	11/13/90	PVC/4"	106.06	108,32	27.5	12.5 to 27.5	93.56 to 78.56	15.15	93.17
SC-16S	31-35217-5	11/14/90	PVC/4"	105.32	108.05	27	12 to 27	93.32 to 78.32	18.35	89.70
SC-20S	31-35218-3 31-35219-7	11/13/90	PVC/4"	101.74	104.45	22	7 to 22	94.74 to 79.74	13.72	90.73
SC-22S SC-23S	31-35219-7	11/14/90 11/16/90	PVC/4" PVC/4"	96.17 102.83	99.65 102.21	18 24	3 to 18 9 to 24	93.17 to 78.17 93.83 to 78.83	9,07 11.73	90.58
SC-25S	31-38188	12/23/91	PVC/4"	102.00	102.27	21	6 to 21	94.27 to 79.27	9.97	90.48 92.30
SC-27S	31-41031	12/15/92	PVC/4"	-	100.54	22	7 to 22	91.54 to 76.54	9.36	91.18
SC-1S	31-28825-1	6/22/88	PVC/4"	- .	87.26	55	35 to 55	50.26 to 30,26	3.69	83.57
SC-3S	31-28914-2	6/8/88	PVC/4"	-	90.32	55	35 to 55	53.32 to 33.32	6.34	83.98
SC-4S	31-21689-7	6/7/84	PVC/2"	0440	93.65	45 20	35 to 45	56.65 to 46.65	6.89	86.76
SC-5S SC-6S	31-35434-1 31-21691-5	11/28/90 6/21/84	PVC/4" PVC/2"	94.18	96.55 94.62	20 75	5 to 20	89.18 to 74.18	11.91	84.64
SC-10S	31-23369	11/11/85	PVC/4"	-	95.38	75 55	45 to 75 35 to 55	47.62 to 17.62 58.38 to 38.38	6.59 7.27	88.03 88.11
SC-17S	31-35229-4	11/19/90	PVC/4"	106.53	109.26	28	13 to 28	93.53 to 78.53	20.45	88.11 88.81
SC-18S	31-35230-8	11/15/90	PVC/4"	93.43	95.72	19	4 to 19	89.43 to 74.43	9.38	86.34
SC-19S	31-35224-3	11/15/90	PVC/4"	90.14	92.98	17	2 to 17	88.14 to 73.14	6.16	86.82
SC-21S	31-35225-1	11/15/90	PVC/4"	90.57	92.64	18	3 to 18	87.57 to 72.57	6.54	86.10
SC-24S	31-35435-1	11/28/90 4/5/83	PVC/4" PVC/6"	91.57 89.06	93.57 90.33	20	5 to 20	86.57 to 71.57	9.81	83.76
IW-1					. 401.44	62	32 to 62	57.06 to 27.06	5.32	85.01

Note:

- (1) Screened interval elevations for well locations without surveyed ground elevations calculated assuming a ground elevation of 2 feet below the surveyed well elevation
 - (i.e., top of inner casing elevation).

- (i.e., top of inner casing elevation).

 (2) All elevations based on vertical datum NGVD 1929

 (3) Feet Below Grade

 * Monitoring well not surveyed, casing elevation is approximate.

 ^ USGS observation well (NJ-WRD Well Number 15-0372) land surface is 120 feet above NGVD 1929, with the measuring point 2,80 ft above the land surface. The total well depth is 154 (seet, with a screened interval of 129-149 feet below grade. (USGS Water Resources Data, New Jersey Water Year 2002 Vol. 2: Water Data Report NJ-02-2)
- e Monitoring well SC13S destroyed, no water level measurement collected.

msl - Feet Above Mean Sea Level

ft - Feet

NM - Not Measured

UKN - Unkown

TABLE 2 SHIELDALLOY METALLURGICAL CORPORATION NEWFIELD, NJ GROUND WATER ANALYTICAL RESULTS ON-SITE & OFFSITE WELLS February 2008

WELL NUMBER SCREENED INTERVAL	SC1S 35-55	SC1D 85-95/ 100-115	SC2D(R) 106-116	SC3S 35-55	SC3D(R) 102-112	SC5S 5-20	SC5D 90-120	SC10S 35-55	SC10D 105-125		SC24D 105-115		SC26D 127-137	IW 1 32-62	RW6S 55-75	RW6D 90-125	RIW2 30-55	W9 110-130	LAYNE 42-47
PARAMETER																			
TOTAL METALS (ug/L)																			
Chromium	U	U	11400	Ų	U	U	1350	υ	857	U	υ	15.2	36.5	U	1290	2950	1420	NA	857
Hexavalent Chromium	U	U	11400	U	U	U	1300	U	810	υ	U	U	32	U	1100	2700	1100	NA	900
Sodium	58700	70000	52400	100000	77100	7260	36500	79900	190000	6340	32900	34100	33100	24900	69300	157000	63800	NA .	96500
OTHER PARAMETERS (mg/L) (1)																			
pH (Field)	5.71	6.58	6.59	5.75	4.84	5,36	6.41	7.49	8.62	4.53	5.71	6.90	8.56	6.51	6.90	7.71	6.43	NA	7.61
Sulfate	87.4	85.8	31.9	185	124	21.8	44.5	70.0	85.5	168	48.9	U	20.4	41.3	101	143	100	NA	70.5
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Total metals performed via Method 3010A/6010B; Hexavalent Chromium via Method 7198; Sulfate Method 300.0.
(1) - All concentrations in mg/L, except pH in Standard Units.
U - Indicates compound analyzed for but not detected (organice and inorganics).
NA - Not analyzed.

TABLE 3 SHIELDALLOY METALLURGICAL CORPORATION NEWFIELD, NJ GROUND WATER ANALYTICAL RESULTS ON-SITE & OFFSITE WELLS March 2008

WELL NUMBER SCREENED INTERVAL	SC1S 35-55	SC1D 85-95/ 100-115	SC2D(R) 106-116	SC3S 35-55	SC3D(R) 102-112	SC5S 5-20	SC5D 90-120	SC10S 35-55	SC10D 105-125	SC24S 5-20	SC24D 105-115	SC25S 7-22	SC26D 127-137	IW1 32-62	RW6S 55-75	RW6D 90-125	RIW2 30-55	W9 110-130	LAYNE 42-47
PARAMETER																			
TOTAL METALS (ug/L) Chromium Hexavalent Chromium Sodium	U U 61400	U U 85600	11200 10700 53800	U U 109000	U U 81800	U U 7880	1270 1300 36900	U U 70100	781 800 240000	U U 6680	U U 32600	U U 30800	71.4 68 62300	U U 27900	NA NA NA	2750 2700 161000	1420 1400 68400	NA NA NA	871 900 109000
OTHER PARAMETERS (mg/L) (1) pH (Field) Sulfate	7.50 86.4	6.13 91.1	5,90 32.0	5.89 195	4.89 127	5.23 19.6	5.73 44.6	7.63 53.5	8.02 105	4.13 105	5.15 51.2	7.13 U	8.06 37.0	5.97 44.8	NA NA	8.07 143	6.37 99.2	NA NA	6.96 73.5

Total metals performed via Method 3010A/6010B; Hexavalent Chromium via Method 7196; Sulfate Method 300.0. (1) - All concentrations in mg/L except pH in Standard Units.
U - Indicates compound analyzed for but not detected (organics and Inorganics).
NA - Not analyzed.

TABLE 4A SHIELDALLOY METALLURGICAL CORPORATION NEWFIELD, NJ GROUND WATER ANALYTICAL RESULTS ON-SITE WELLS APRIL 2008

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ELL NUMBER	Α	В	k	1 . 1	IWC1	IWC2	IWC3	IWC4	IWC5	W2 (R)	W4	sces sc	11S (R)	SC12S	SC32S ⁽¹⁾	SC12D	SC13S ⁽³⁾	SC13D	SC14S	SC15S	SC16S	SC20S	SC20D	SC22S	MWH-4	MWH-10 ⁽²⁾	SC23S	SC25S	SC27S	W9 ⁽⁴⁾	LAYNE.	INFLUE	NT EFFLUE	NT FB0422	08 TB04	2208 TB0	042308 T	B042308A	TB042408	в тво4
REENED INTERVAL (FT)	114-124	36-46	36-46	42-52						2-17			9-24	15-25	15-25		14.7-24.7									119-129	9-24	7-22	7-22	110-130						-				
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ralent Chromium	U	U	270	U	570	900	U	40	190	16	130	16	Ü	200	150	U	NA	ا تا	43	67	Ü	U	Ū	U	710	730	260	U	250	NA	750	NA.	NA.	lυ	N	A	NA	NA	NA.	
1	13500	90100	49100	13500	66200	165000	9960	30400	77300	2830	9530	98700	17900	59300	65200	2490	NΑ	3120	11600	21200	12000	27500	8400	41200	56800	56800	39900	29600	17700	NA	109000	NA NA	NA	U	N	A	NA	NA	NA	
R PARAMETERS (mg/L)		1.								1																								1						
	6.87	7.46	7.40	6.80	6.82	7.79	6.72	6.96	11.16	6.72	5.54	7.36	5.80	6.68	6.68	5.97	NA	4.49	5.56	5.79	6.09	6.43	5.90	6.55	7.24	7.24	5.91	6.45	6.25	NA	7.47	6.96	8.30	NA.	N	A	NA	NA	NA	1
	18.3	88.0	υ	U	94.3	53.6	U	U	U	U	U	79.7	26.0	28.6	24.8	11.0	NA	20.8	19.5	78.2	33.2	11.4	11	32.7	21.0	21.0	147	11	26.1	NA	71.6	NA.	NA.	ں ا	N		NA .	NA	NA	1

TABLE 4B SHIELDALLOY METALLURGICAL CORPORATION NEWFIELD, NJ GROUND WATER ANALYTICAL RESULTS OFFSITE WELLS APRIL 2008

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REENED INTERVAL (FT)	SC1S 35-55		SC2D (R 106-116	SC3S 35-55	SC3D (R) 102-112	SC33D (SC4S 2 35-45	SC4D 110-120	SC5S 5-20	SC5D 90-120	SC6S 45-75	SC6D 110-120	SC10S 35-55	SC10D 105-125	SC17S ⁽²⁾ 13-28	SC17D 143-153	SC18S 4-19	SC18D 119-129	SC19S 2-17	SC19D 120-130	SC21S 3-18	SC21D 125-135	SC24S 5-20	SC24D 105-115	SC26D 127-137	SC28D 133-153	SC-30D 147-157	SC-31D 120-130	SC-32D 92-102	IW1 32-62	IW2 40-70	RW6S ⁽³⁾ 55-75	RW6D 90-125	RIW2 30-55	FB042208	TB042208	TB042308	TB042308A	TB042408	TB042
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rbon tetrachloride	υ	υ	U	U	U	U	NA	NA.	υ	U	U	U ;	NA	NA	NA	U	0	Ü	l u l	Ü	ŭ	Ü	Ü	Ü	U		1 ~	_	1 -	NA	U	NA	NA	NA	U	U	U	U	U	1
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loroethane	บ	U	U	U	U	U	NA	NA	U	lυl	U	υ	NA	NA	NA.	Ū	انا	Ü	Ŭ	U	Ü	U	l ü	U	1		U	U	U	NA	U	NA	NA	NA	U	U	U	U	U	
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Dichlorobenzene	Ū	Ū	Ιŭ	l ŭ	l ŭ	Ü					- 1	U	NA	NA	NA	U	U	U	U	U	υ	U	U	U	U	υ	υ	U	U	NA	u	NA.	NA	NA	υ	lυ	U	U	lυ	1
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-1,3-Dichtoropropene	U	U	U	U	U	U	NA	NA	U	ן ט ן	U	u	NA	NA	NA	Ū	Ū	ŭ	ŭ	Ü	ü	Ü	υ	Ü	U	1 11	1)	-	U	1 1	U	NA	NA	NA	U	U	U	U	U	1
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nylene chloride	U	U	υ	U	U	U	NA	NA	υ	Ul	υ	U	NA	NA	NA	Ü	Ü	ŭ	u	Ü	"			U	U		U	U	U	NA	U	NA	NA	NA	U	יטן	U	U	U	ļ
2,2-Tetrachloroethane	υ	U	U	U	U	υ	NA	NA	U	ΙυΙ	Ū	ŭ	NA	NA	NA	Ü	Ü	- 1	1 - 1	- 1	"	U	U	U	U	υ	U	U	U	NA	U	NA	NΑ	NA	U	U	U	U	U	1
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I-Trichloroethane	U	υ	U	lυ	U	ا آ	NA	NA	บ	ŭ	ŭ	ŭ	NA NA		NA .		U	U	U	U	ย	U	U	υ	U	υ	U	U	υ	NA	U	NA	NA.	NA	U	U	U	U	U	1
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loroethene	0.48J	10.6	5.8	2.6	12.9	13.0	NA	NA	U			U	NA .	NA	NA	υ	U	U	υ	U	U	U	υ	U	U	U	U	U	U	NA	υ	NA .	NΑ	NA	υ	U	U	υ	υ	İ
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nes (total)	ŭ	Ü	ย	Ü	U	0		NA	U	U	U	U	NA	NA	NA.	U	U	U	U	U	U	U	U	U	U	U	υ	U	lυ	NA	u l	NA	AIT	NA .	U	lυ	U	U	U	1
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ile TICs	υ	U	U	υ	U	U	NA	NA	U	U	U	U	NA	NA	NA	υ	0.38J	U	3.3J	υ	U	U		υ	U	U	0.54JN	·	U	NA		NA	NA	NA .	U	0.31J	U	l u		
RGANICS (ug/L)							1 1																				0.0			10.			100	-101		0.010		1	<u> </u>	
omium (Total)	U	U	11700	U	U	U	146	8350	υ	1550	144	3830	u	806	NA	10.2	U	u l	u l	1			l l	l l						l t			1	ŀ		1			İ	1
valent Chromium	U	υ	9900	U	υ	u o	37	8000	Ū	1400	160	3500	ŭ	760	NA	U	Ü	Ü	U	U	10.2	U .	U	U	263	175	U	U	U	U	5550	NA	2830	1450	U	NA NA	NA	NA NA	NA NA	1
ım į	53400	67600	54500	113000	82900	81300	18700	51700	6390	35900			70400		NA	4730				U 21200	U 3680	U	U	U	270	160	U	υ	U	U	5500	NA	2900	1000	U	NA.	NA	NA.	NA	1
50.04.04.05	1												10100	2-12-000	- /0.	4700	2000	31900	22000	21200	3680	26200	6010	32600	122000	224000	4980	35300	4810	53800	72900	NA	149000	67300	U	NA	NA NA	NA NA	NA NA	ऻ
ER PARAMETERS (mg/L)	- 1			[j l			- 1			[- 1	1							- 1	l				1							ı	- 1	- 1		1	ł	1	Į.	İ
l l	5.63	5.74	5.90	5.36	4.65	4.65	4.88	6.27	4.79	5.55	7.12	6.54	6.71	7.91	NA	4.78	5.88	5.80	5.17	4.55	5.59	4.67	۱ ۱	5.00									. 1	- 1		1		1	İ	1
e	80.2	78.5	30.9	188	123	117	19.6	4.5	15.8	42.5	109	301	62.6	110	NA	7.8		23.3	31.1	16.0	16.6	22.5	4.14 108	5.22 47.1	8.46	6.73	5.34	5.24	5.67	5.78	6.18	NA	6.81	5.89	NA	NA NA	NA.	NA NA	NA NA	į .
Analysis performed via EPA Metho	od 624.																				10.0	22.3	1 100	4/.[60.9	189	U	31.6	υ	84.5	63.4	NA	139	97.0	U	NA NA	NA	NA NA	NA NA	ــــــــــــــــــــــــــــــــــــــ
netals performed via SW846 Meth	hod 6010	B; Hexava	lent Chromi	um via SW	/846 Method	7196A: and	Sulfate vi	a Method 3	വറ വട്ടം	SAS Moth	nd 0056)																													
incates compound analyzed for but	t not dete	cted (orga	nics and inc	rganics).		,	_ C.IGIO VI		(344	ONO WINDLE	ou 3000).																													
icates an estimated value (organic	ics).																																							
ne analyte is found in the associate dicates presumptive evidence of a	ed blank a	as well as i	n the sampl	e (organic:	s) or the repo	orted value w	vas obtain	ed from a r	eading tha	at was less	s than the C	Contract Re	equired De	tection Lir	nit (CBDL)	but not ar	pater than	or oquat (to the Inch-	umont D-4	tantian I !	de arou vir																		
	compou	nd.			•								- 4un 00 00		(OIIDE)	Sur not gr	oater nigh	or edual (io uie irisilit	urient Det	ection Lin	H (ILAE) (İF	norganics).										•							
lot analyzed.																																								
Ouplicate sample of well SC3D(R).																																								
uplicate sample of well SC3D(R), onitoring well SC17S potentially d draction well RW6S offline throug	lamaged	(water colu	imn only ap	proximately	y 1-foot thick)), no sample	collected.	l.																																

TABLE 5A SHIELDALLOY METALLURGICAL CORPORATION

NEWFIELD, NJ

TRICHLOROETHENE, TOTAL CHROMIUM & HEXAVALENT CHROMIUM ANALYTICAL RESULTS

ON-SITE WELLS

QUARTERLY SAMPLING: FEBRUARY 2008 THROUGH APRIL 2008

		Γ	T	T	I		T	Т	Т	T	Τ			т		·																	
PARAMETER/DATE	Α	В	ĸ	L	IWC1	IWC2	lwc	3 IWC4	IWC5	W2 (R)	W4	SC9S	SC11S (R)	80128	SC32S(1)	80100	CC13C(3)	00400	00440	00450						(1)						PLANT	PLANT
Trichloroethene (ug/L)				1	1]			1	1.12(1)	 `` ·	0000	001.0(1)	100120	00020	30120	30133	SC 13D	SC145	SC158	SC16S	SC20S	SC20D	SC22S	MWH-4	MWH-10 ⁽²⁾	SC23S	SC25S	SC27S	W9 ⁽⁴⁾	LAYNE	INFLUENT	EFFLUEN
/08	NA	NA	NA	NA	NA	NA	NA	NA	NA.	NA	NA	NA	NA	NA	NA NA	NA	NA NA	l ala	1		l I	١			i		,						
/08	NA	NA	NA	l NA	NA	NA	l NA	NA	NA	NA	NA	NA	NA	NA NA	Į.		1	INA	NA	NA	NA	NA	NA	NA	NA	NA							
./08	U	U	1.6	NA	0.30J	11	111	1 77	0.21J	NA NA	NA	19/5	INA NA	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA
Chromium (Total) (ug/L)			1.5	1.07	0.000	 '''	1 -	 	0.213	INA	INA	U	NA NA	NA	NA_	NA	NA NA	NA NA	NA	NA	NA	39.7	U	U	11.9	12.6	· U	NA	0.88J	NA	NA	5.0	υ
/08	NA	NA	NA	NA	NA	NA.	NA	l NA	NA	NA	NA	NA	NA	NA NA	l NA	١	1	l															
/08	NA	NA	NA	NA	NA	NΔ	NA	1	NA	NA.	NA				NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	15.2	NA	NA	857	NA	NA NA
/08	2410	214			848	1000		50.9		1		NA	NA	NA	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	U	NA	NA	871	NA	NA.
exavalent Chromium (ug/L)			000	723	040	1000	19.5	50.9	2/0	16.5	148	18.6	13.1	134	155	U	NA NA	U	20.0	86.1	U	33.8	U	U	1570	1810	537	U	435	NA	918	NA	NA.
⁽⁰⁸	NA	NA	NA	NA	NA.	NA	NA.	NA	NA	NA	NA	NA	h14					Ì															
′08	NA	NA	NA	NA	NA	NA	1	NA NA	NA NA	NA NA	NA NA	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA	U	NA	NA	900	NA	NA
/08	U	11	270	1 11	570	900	1 177	1	l .	INA	IVA	1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA	U	NA	NA	900	NA	NA
Total motals perferend size \$4.45 at 2014		<u> </u>	2,0	10	1 3/0	1 300	10	40	190	1 16	130	16	U	200	150	U	NA	U	43	67	U	U	U	U	710	730	260	U	250	NA	750	NA	NA

Total metals performed via Method 6010; Hexavalent Chromium via Method 7196; Carbonate and Bicarbonate via Method 310.1; Sulfate, Chloride and Nitrate via Method 300.0; and TOC via Method 9060.

U - Indicates compound analyzed for but not detected (organics and inorganics).

J - Indicates an estimated value (organics).

B - The analyte is found in the associated blank as well as in the sample (organics) or the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but not greater than or equal to the Instrument Detection Limit (IDL) (inorganics).

NA - Not analyzed

(1) - Duplicate sample of well SC12S

(2) - Duplicate sample of well MWH-4

(3) - Monitoring well SC13S destroyed no ground water samples calleded theirs.

(3) - Monitoring well SC13S destroyed, no ground water samples collected during February, March and April 2008.
 (4) - Extraction well W9 offline since approximately February 2007, no ground water samples collected during February, March and April 2008.

TABLE 5B

SHIELDALLOY METALLURGICAL CORPORATION

NEWFIELD, NJ

TRICHLOROETHENE, TOTAL CHROMIUM & HEXAVALENT CHROMIUM ANALYTICAL RESULTS

OFFSITE WELLS

QUARTERLY SAMPLING: FEBRUARY 2008 THROUGH APRIL 2008

	r	T			т			r		,	,																						
SC1S	SC1D	SC2D (R)	SC3S	SC3D (R)	SC33D ⁽¹⁾	SC4S	SC4D	SC5S	SC5D	SC6S	SC6D	SC10S	SC10D	SC17S ⁽²⁾	SC17D	SC18S	SC18D	SC19S	SC19D	SC21S	SC21D	SC24S	SC24D	SC26D	SC-28D	SC-30D	SC31D	SC32D	IW1	IW2	RW6S ⁽³⁾	BWEL	a BIW
															-			1	100.00	1002.0	1002.0	002-10	00240	OOZOD	00 200	100-000	00011	COOLD		.,,,		111100	41
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA	NA	NA	NA	NA	NA.	l NA	NA	NA	NA	NA	NA	NA	NA	NA
NA	NA	NA	NA	NA NA	NA	NA	NA	NA	NA	NA	NA	NA	NA NA	NA	NA	NA		NA	1		1		L	1		1	1		NΔ	NΔ	NΔ	1	NA.
0.48J	10.6	5.8	2.6	12.9	13.0	NA	NA	lυ	2.5	0.80.1	10.4	NA	NA		1	1	l .	l iii	1 11	1 10	13					1 11		117	NIA	22.6	NA		NA
							<u> </u>	1		T			 	1		<u> </u>		ا	 	 	1.5	 	3.4	2.0	13.7	 	3.5	-	IVA	33.0	INA	11/	+ "
U	U	11400	U	U	NA	NA	NA	U	1350	NA	NA	υ	857	NA	NA NA	NA	NA NA	NA	NA.	NA	NA.	l u	1	36.5	NA	NA	NΔ	NΔ		NΔ	1290	2950	1420
U	U	11200	U	· U	NA	NA	NA	U	1270	NA	NA	lυ	781	NA	1	l .		Į.	1	1		l ŭ	l ĭi		t	1	1		ı	NΔ	NΔ	0750	1400
υ	U	11700	ļυ	U,	Ĵυ	146	8350	υ	1550	144	3830	lυ	806	NA NA		1	U	U	Ü	1	1 11	l ŭ	l ŭ		175	1 11	1 11	111	l ĭi l	5550	NΙΔ		
														 			_ <u> </u>		 	10.2	 	 	 	200	173	 		-		3330	14/1	2000	1130
υ	υ	11400	U	. U	NA	NA	NA	U	1300	NA	NA	U	810	NA NA	NA	NA .	NA	NA	NA	NA	NA	1 11	1 11	32	NΑ	NA	NΔ	NA.	١., ا	NΔ	1100	2700	1100
U	U	10700	U	U	NA NA	NA	NA	U	1300	NA	NA I	U	E .	ŀ	E		l .	1	1	1		l ŭ	l ŭ	68		1	I		ı	NΙΔ	NΙΔ		
U	U	9900	U	ļυ	lυ	37	8000	U	1400	160	3500	lυ		NA	l .	L	Ü	l ü	111	111	1 11	l ŭ	١ ١	270		1 10	'''	'''	ı,	5500	NIV		
	NA NA 0.48J U U U	NA NA NA 0.48J 10.6	NA NA NA NA NA O.48J 10.6 5.8 U U 11400 U U 11200 U U 11700 U U 11400 U U 11700	NA NA NA NA NA NA NA NA NA NA NA NA NA N	NA NA<	NA NA<	NA NA<	NA NA<	NA U U U 111200 U U U NA NA NA NA U U U 11700 U U U NA NA NA NA U U U 11400 U U U NA NA NA NA U U U 110700 U U U NA NA NA NA U	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<	NA NA<

VOC Analysis performed via Method 524.2 (well SC28D), all other sample results via Method 624.

Total metals performed via Method 6010; Hexavalent Chromium via Method 7196; Carbonate and Bicarbonate via Method 310.1; Sulfate, Chloride and Nitrate via Method 300.0; and TOC via Method 9060.

U - Indicates compound analyzed for but not detected (organics and inorganics).

J - Indicates an estimated value (organics).

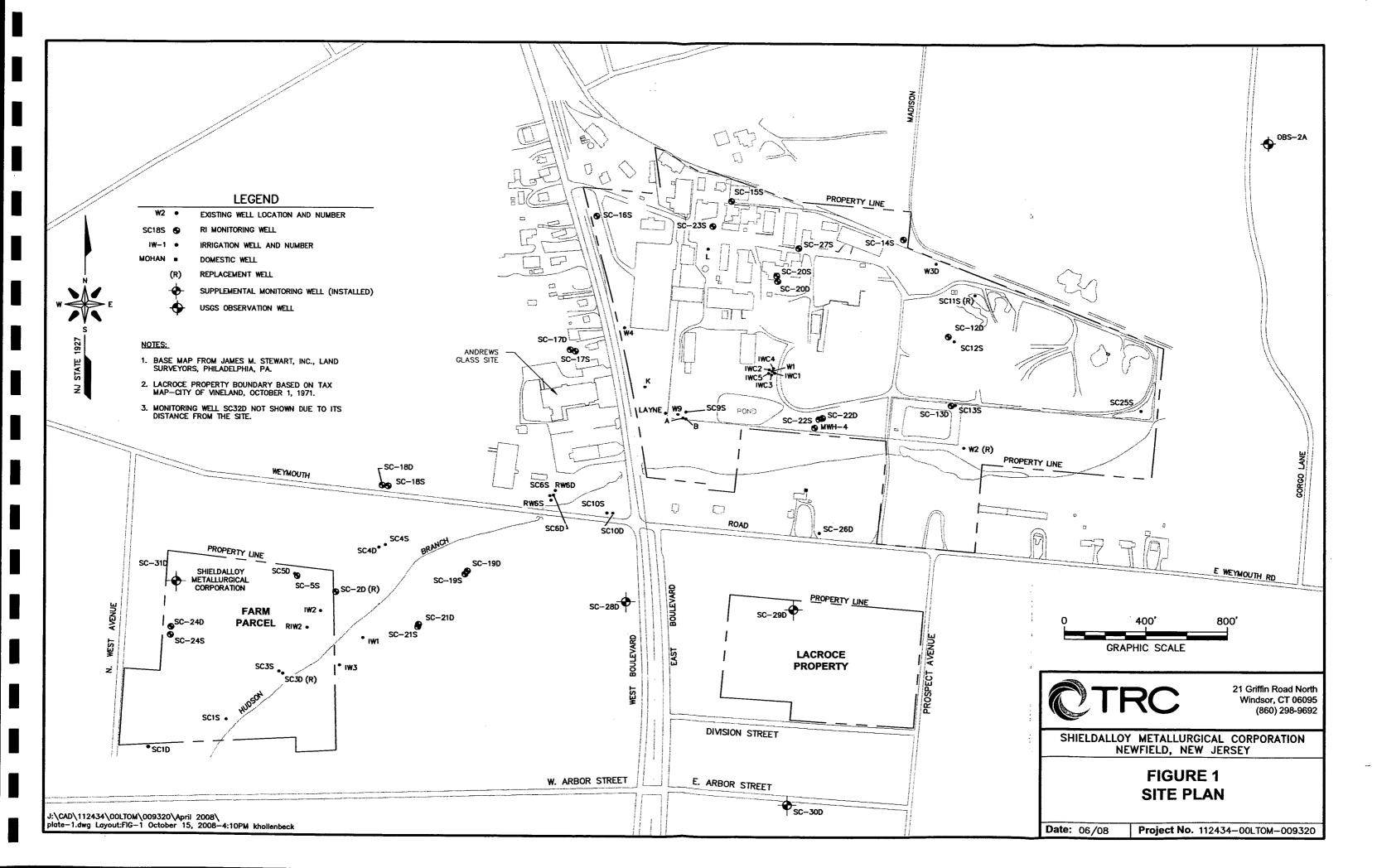
B - The analyte is found in the associated blank as well as in the sample (organics) or the reported value was obtained from a reading that was less than the Contract Required Detection Limit (CRDL) but not greater than or equal to the Instrument Detection Limit (IDL) (inorganics).

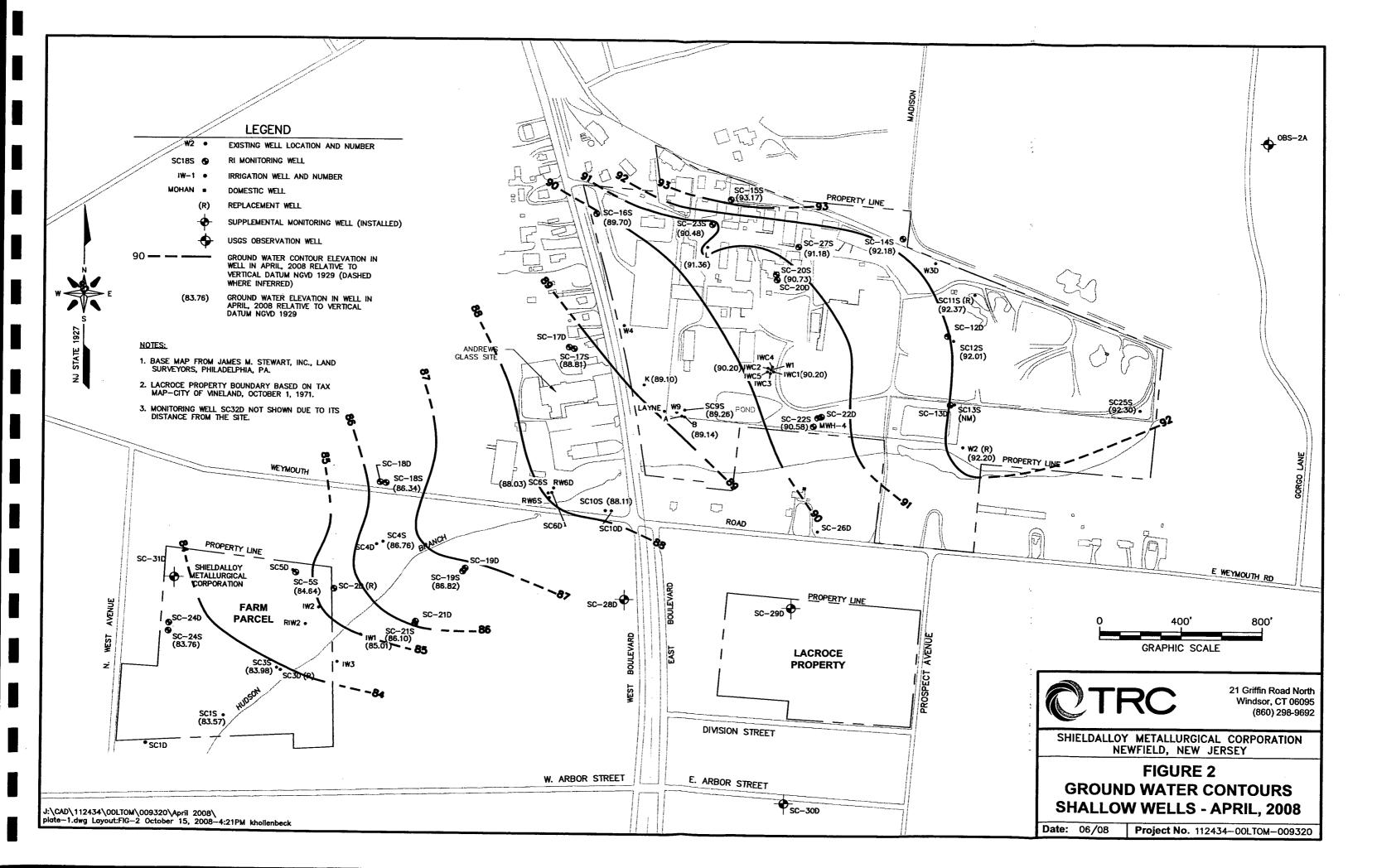
N - Indicates presumptive evidence of a compound

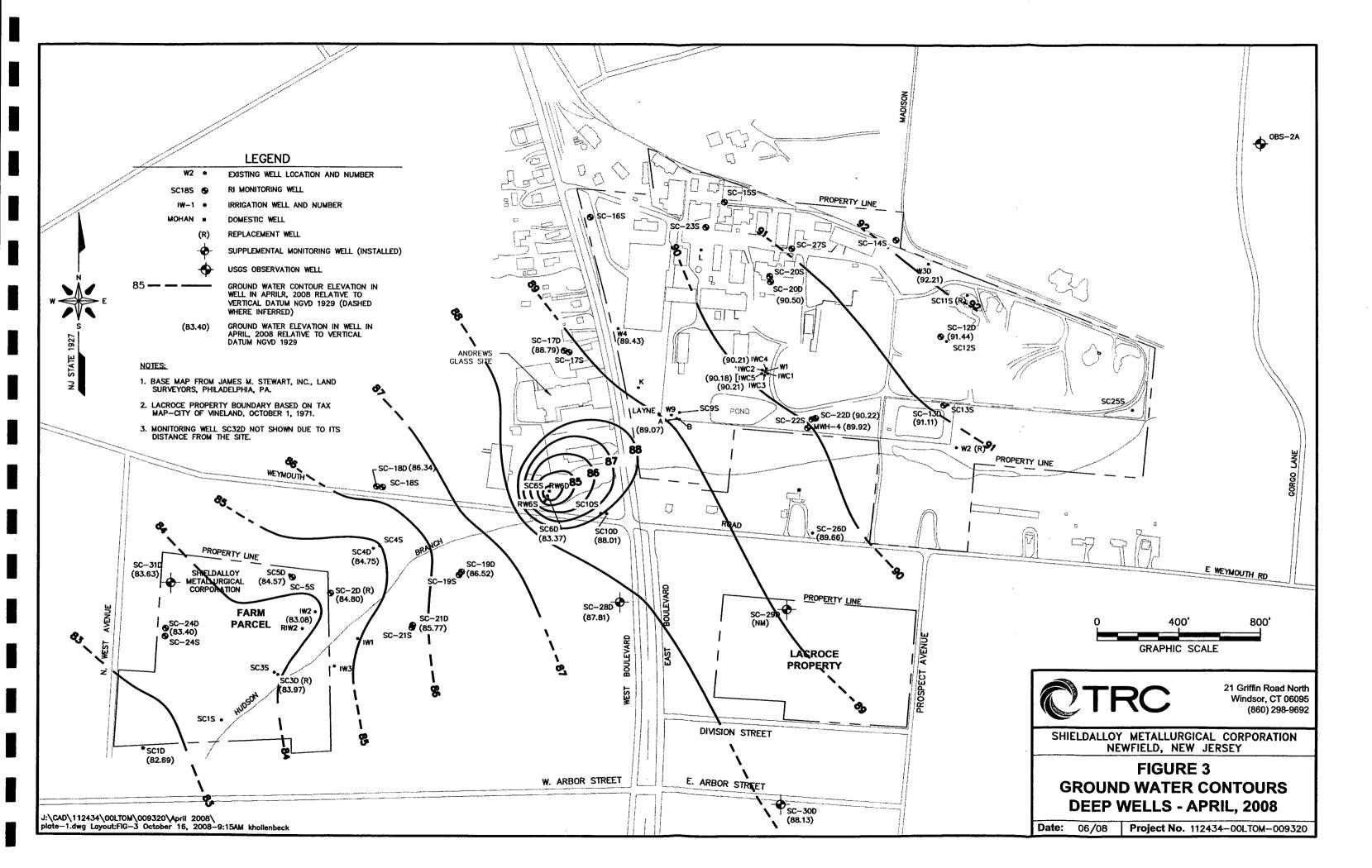
N - Indicates presumptive evidence of a compound.
 NA - Not analyzed.
 (1) - Duplicate sample of well SC3D (R).

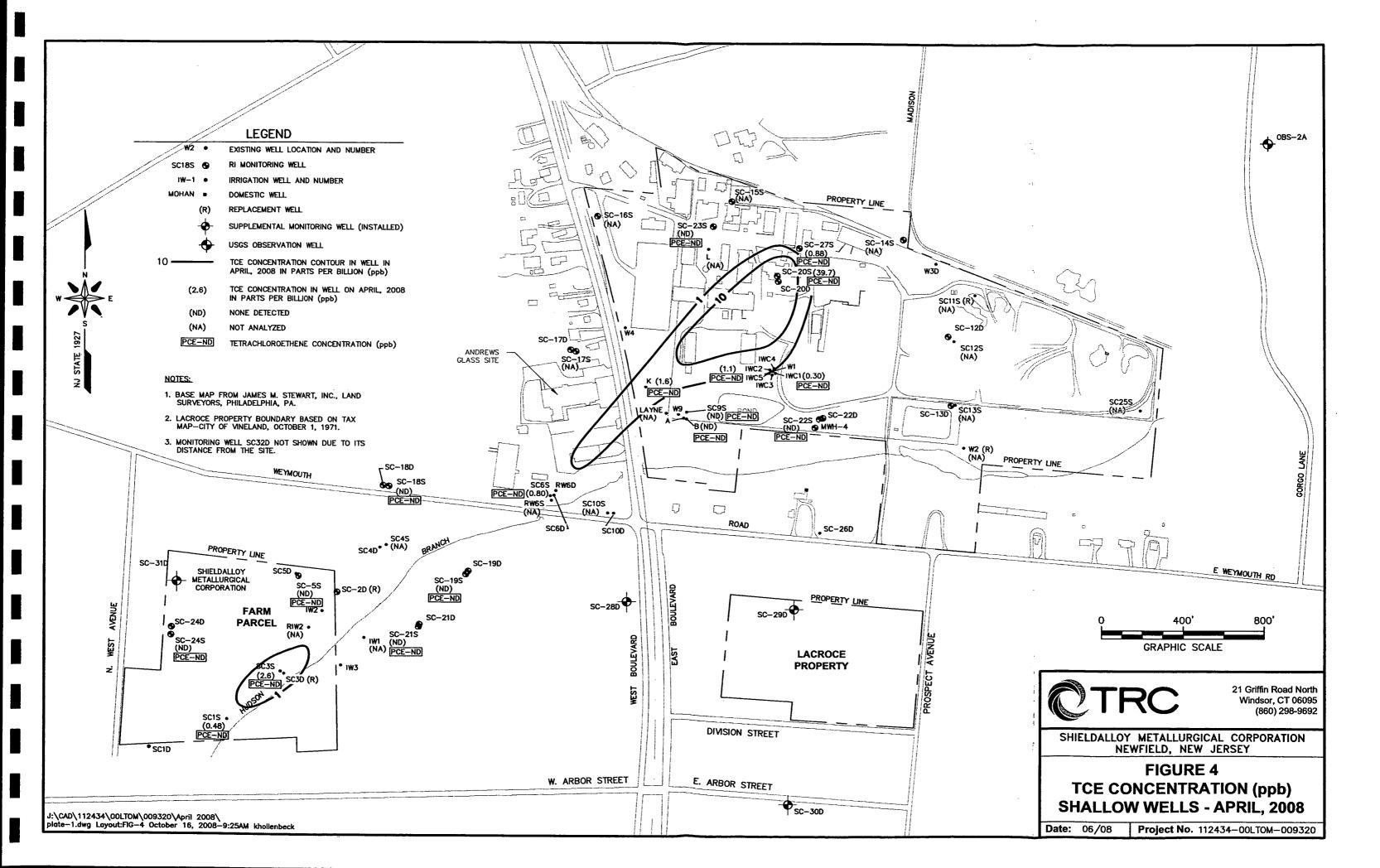
(2) - Monitoring well SC17S potentially damaged (water column only approximately 1-foot thick), no sample colleted during April 2008.

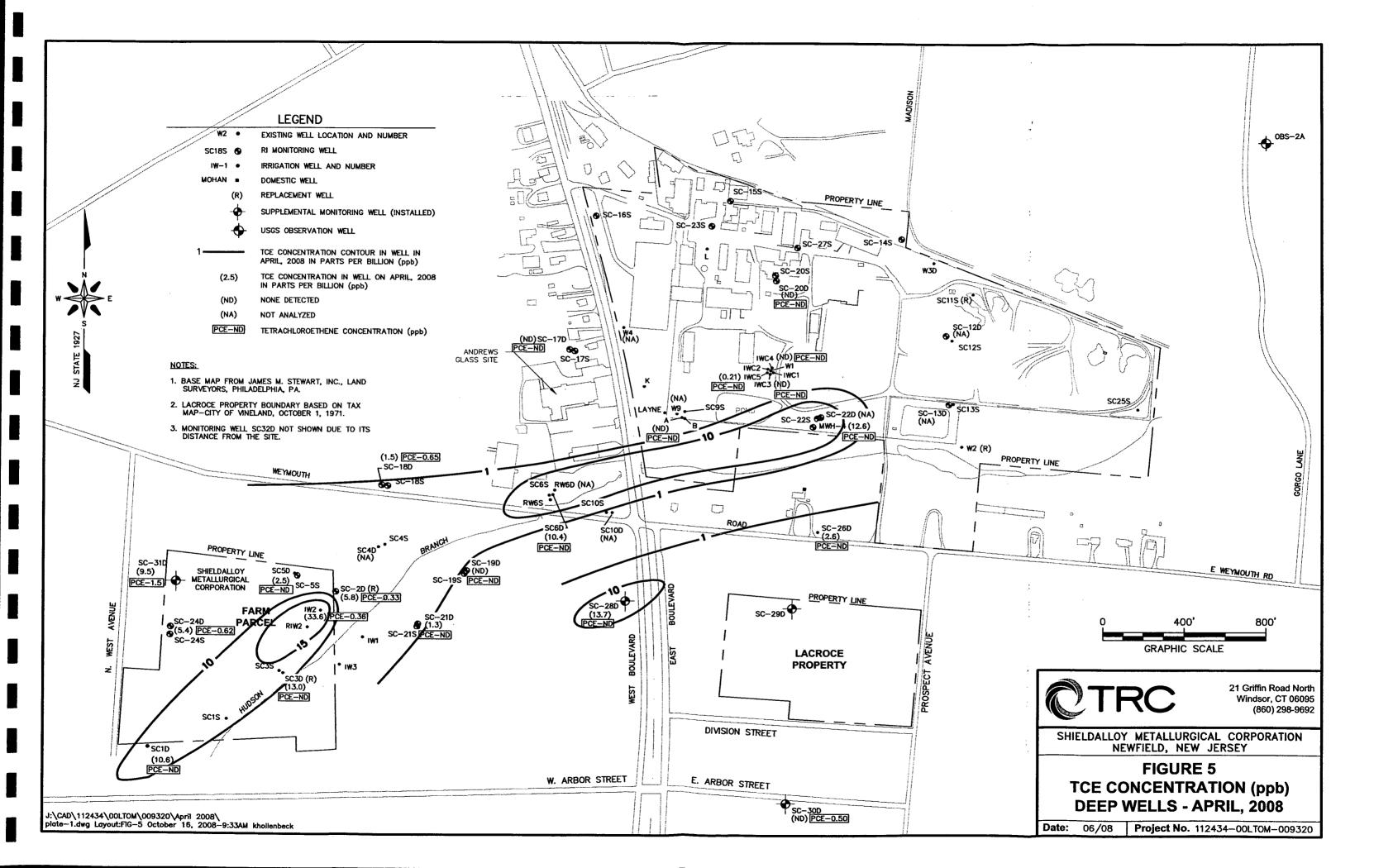
(3) - Extraction well RW6S throughout April 2008 sampling evnet, no ground water sample collected.

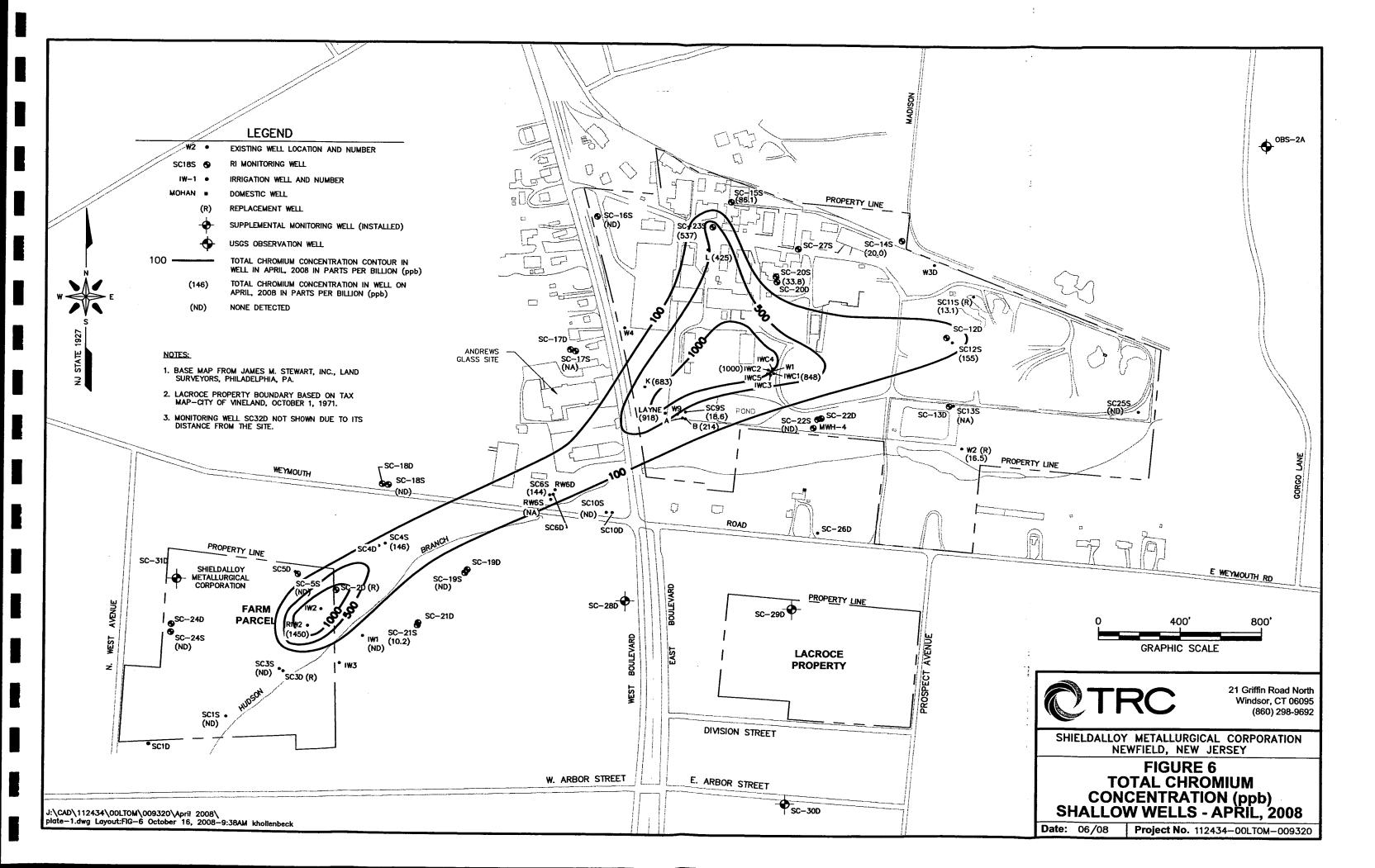


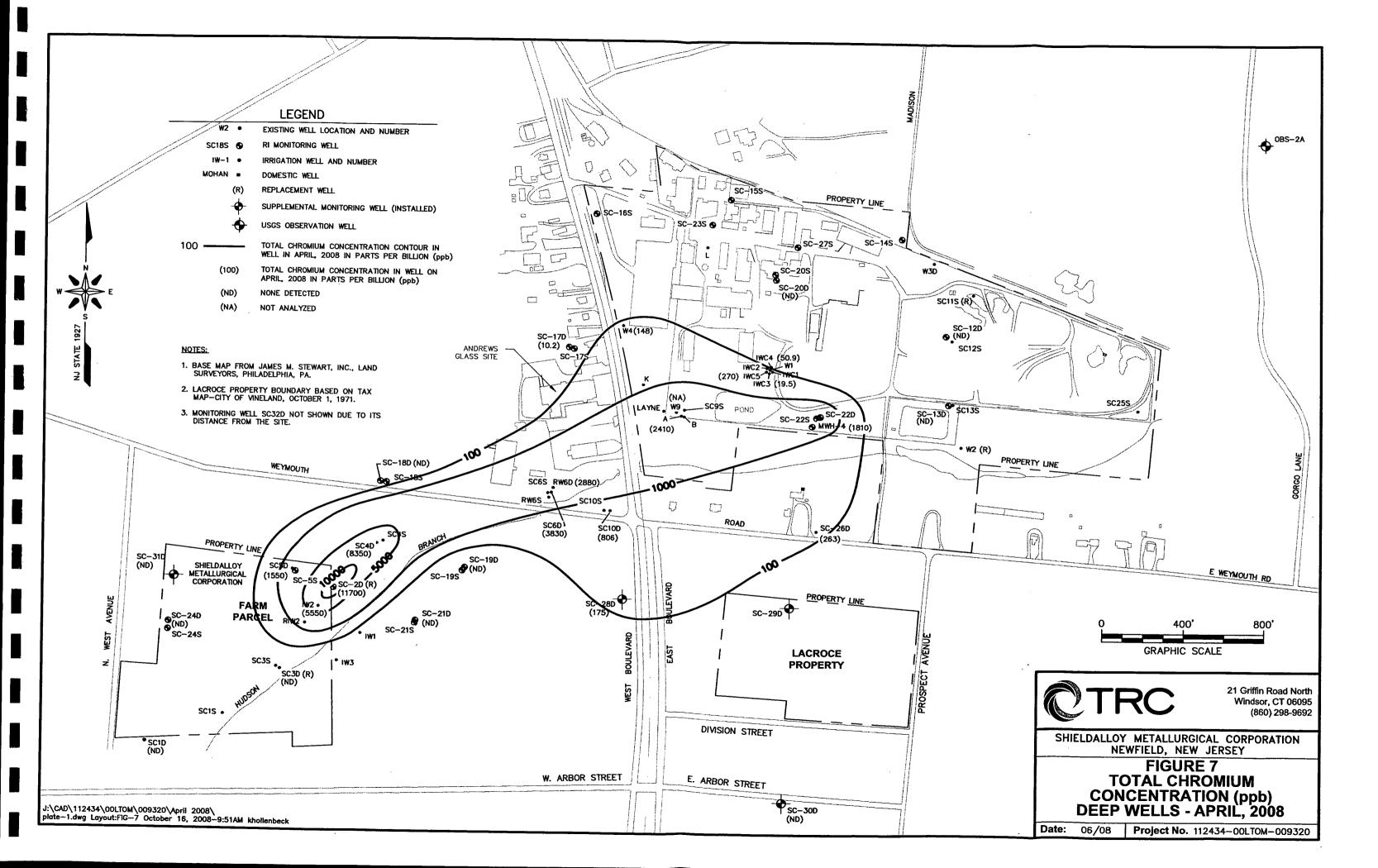


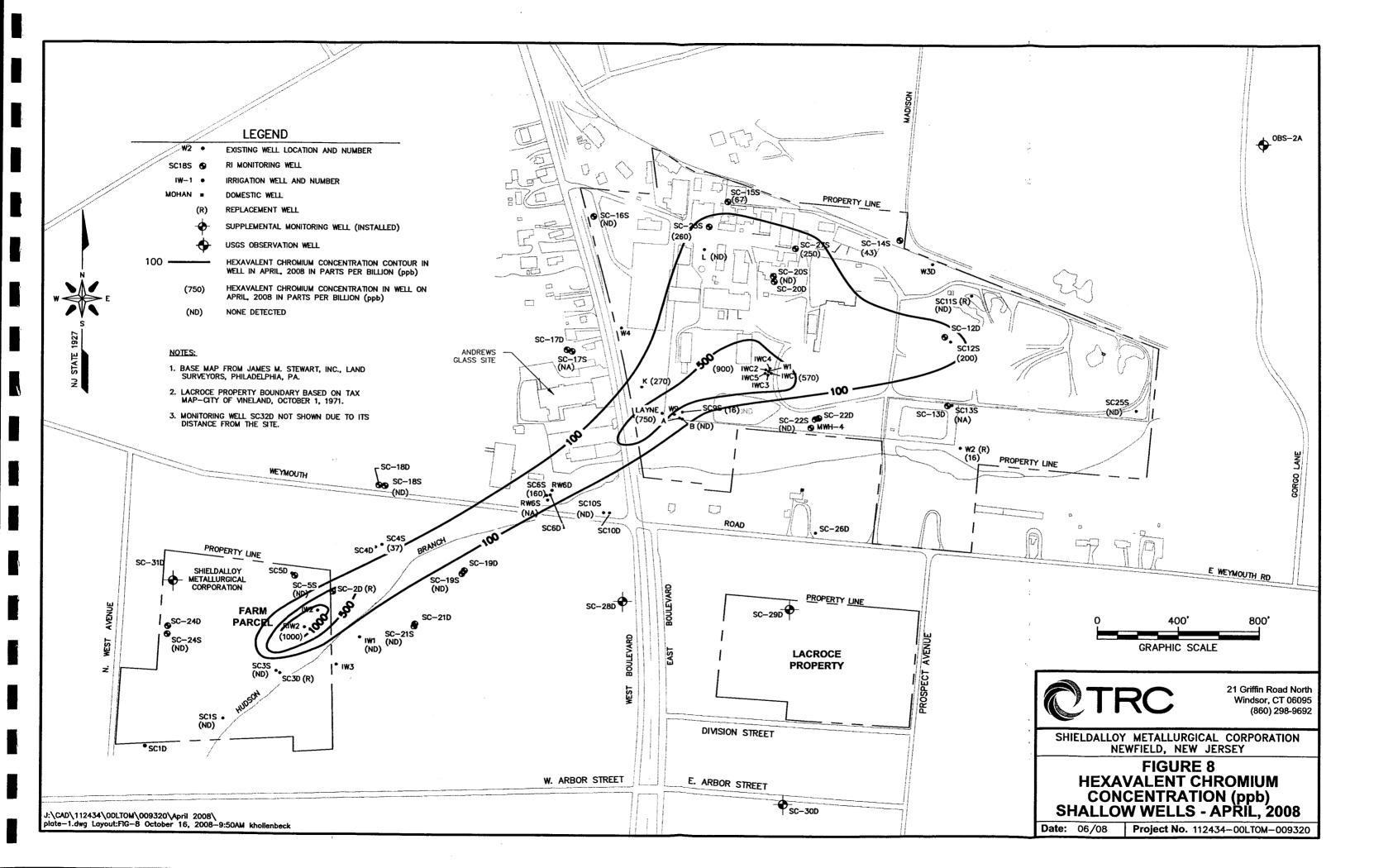












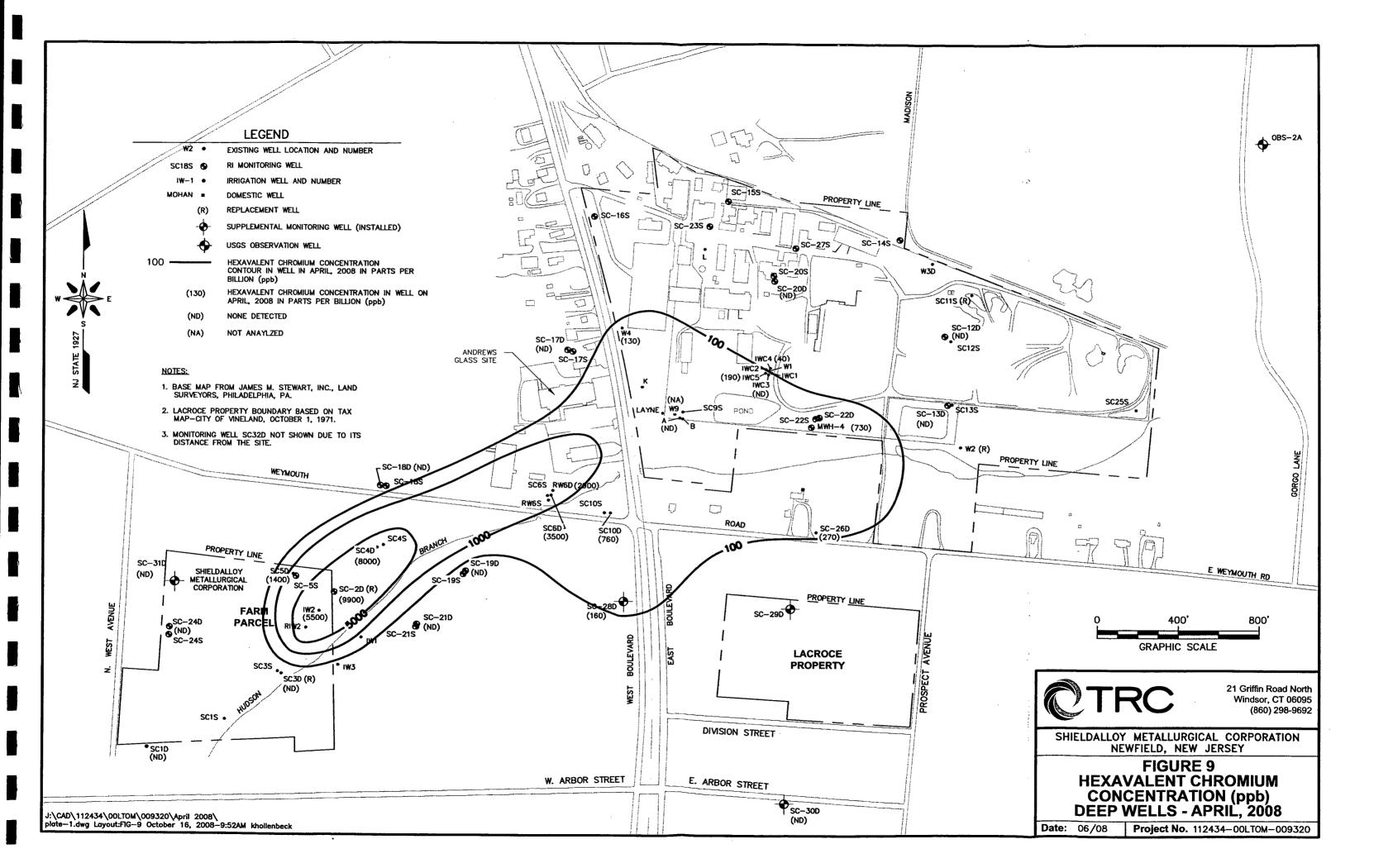
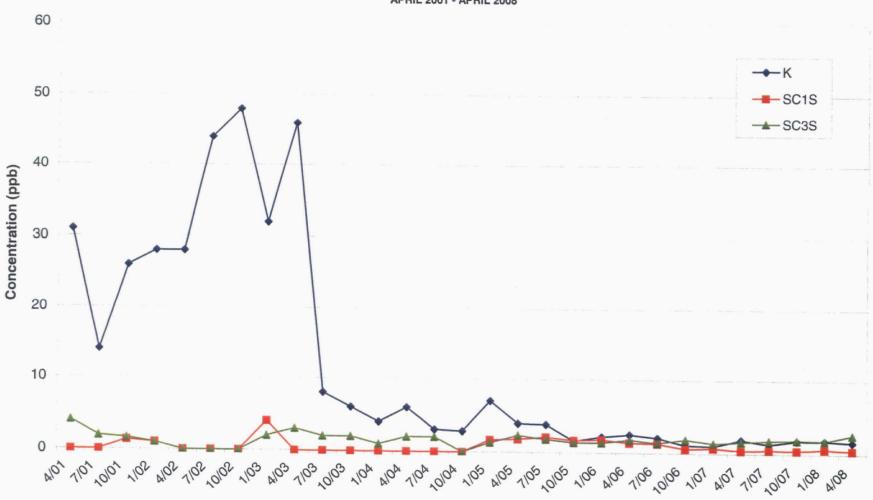


FIGURE 10 SHIELDALLOY METALURGICAL CORPORATION NEWFIELD, NJ TCE CONCENTRATIONS IN SHALLOW MONITORING WELLS APRIL 2001 - APRIL 2008



Sampling Event

FIGURE 11 SHIELDALLOY METALLURGICAL CORPORATION NEWFIELD, NJ TCE CONCENTRATIONS IN DEEP MONITORING WELLS APRIL 1995 - APRIL 2008

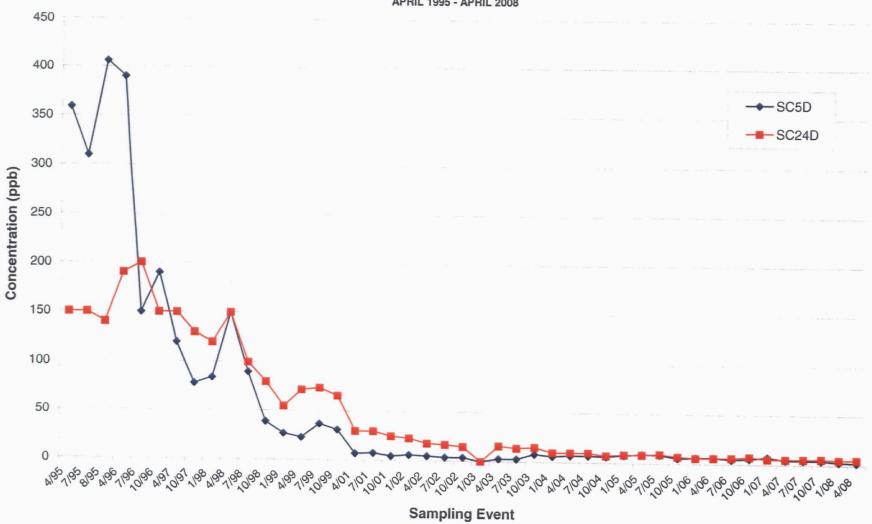
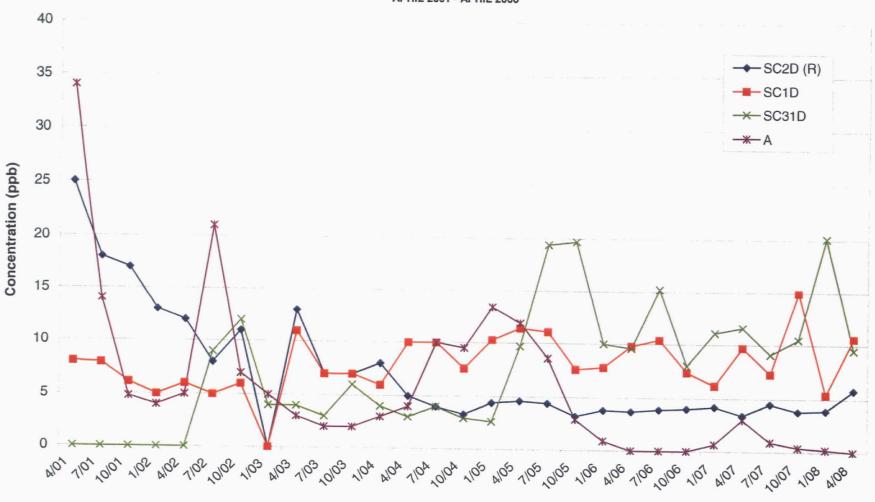


FIGURE 12
SHIELDALLOY METALLURGICAL CORPORATION
NEWFIELD, NJ
TCE CONCENTRATIONS IN DEEP MONITORING WELLS
APRIL 2001 - APRIL 2008



Sampling Event

FIGURE 13 SHIELDALLOY METALLURGICAL CORPORATION NEWFIELD, NJ TOTAL CHROMIUM CONCENTRATIONS IN SHALLOW MONITORING WELLS APRIL 2001 - APRIL 2008

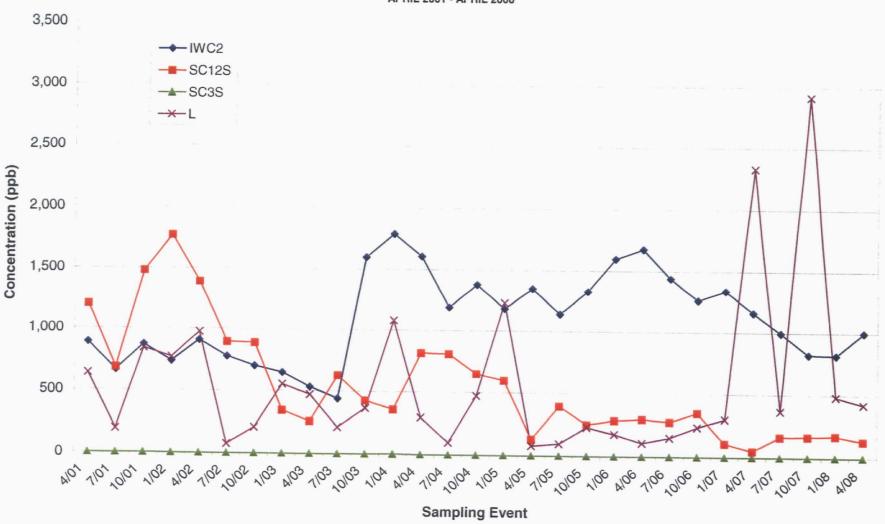
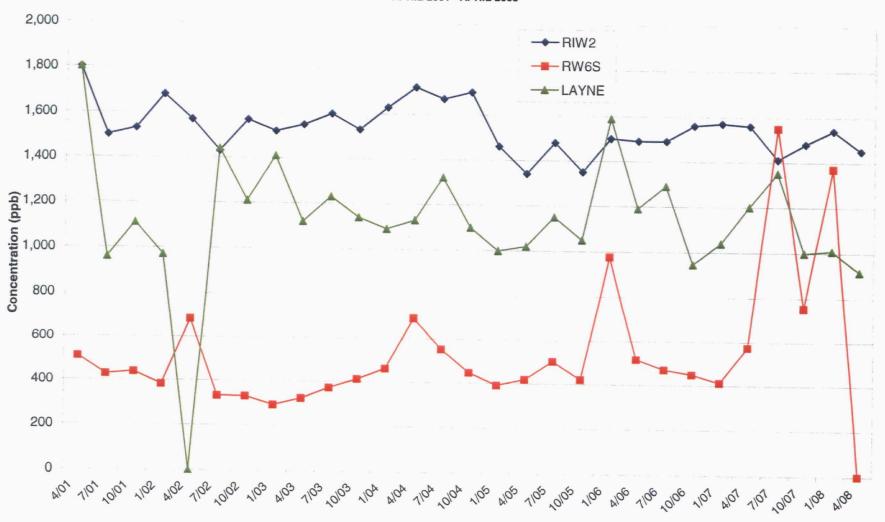
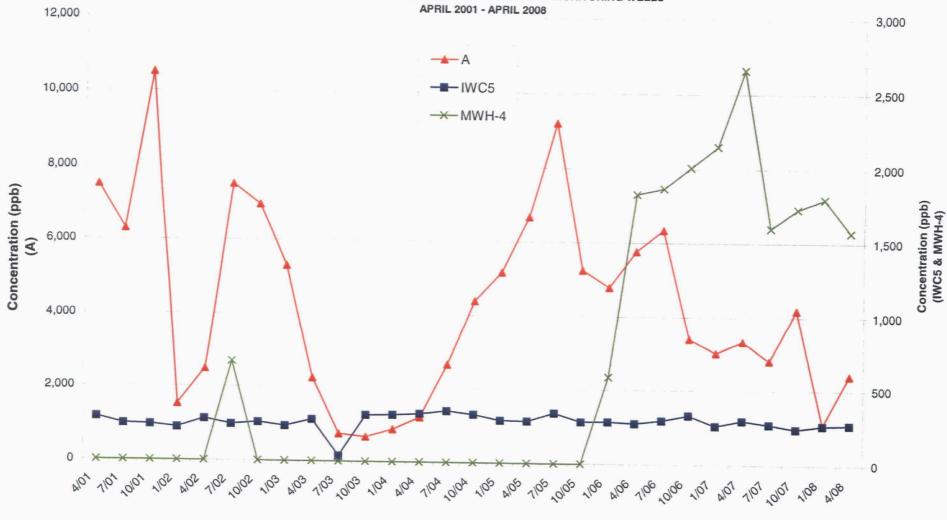


FIGURE 14
SHIELDALLOY METALLURGICAL CORPORATION
NEWFIELD, NJ
TOTAL CHROMIUM CONCENTRATIONS IN SHALLOW EXTRACTION WELLS
APRIL 2001 - APRIL 2008



Sampling Event

FIGURE 15
SHIELDALLOY METALLURGICAL CORPORATION
NEWFIELD, NJ
TOTAL CHROMIUM CONCENTRATIONS IN DEEP MONITORING WELLS



Sampling Event

FIGURE 16 SHIELDALLOY METALLURGICAL CORPORATION NEWFIELD, NJ TOTAL CHROMIUM CONCENTRATIONS IN DEEP MONITORING WELL IW-2 APRIL 1994 - APRIL 2008

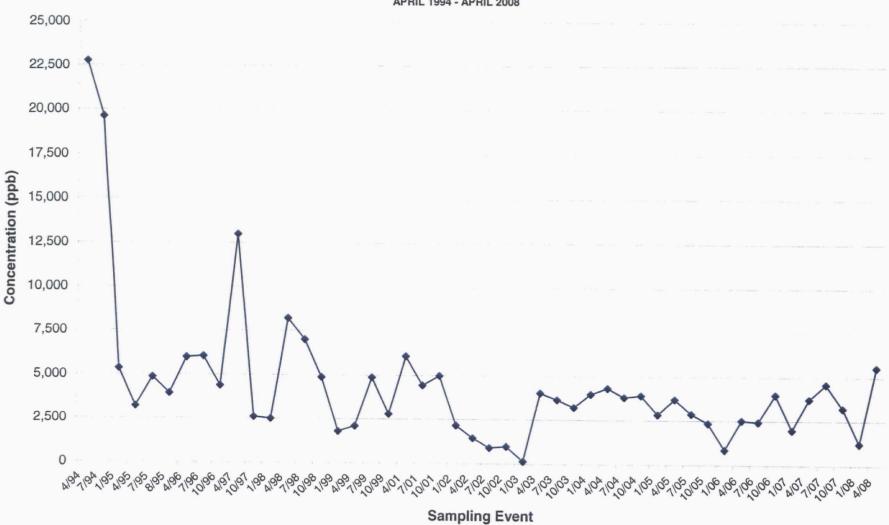
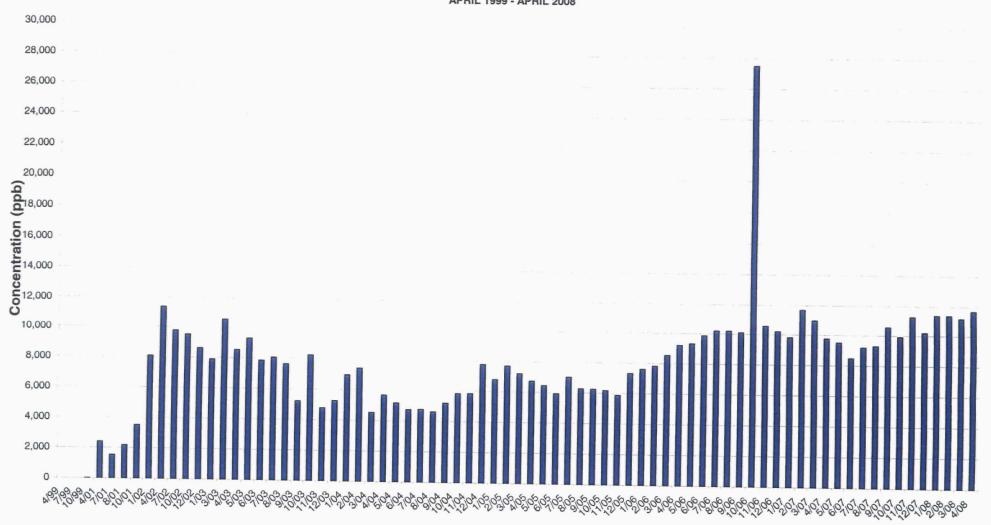
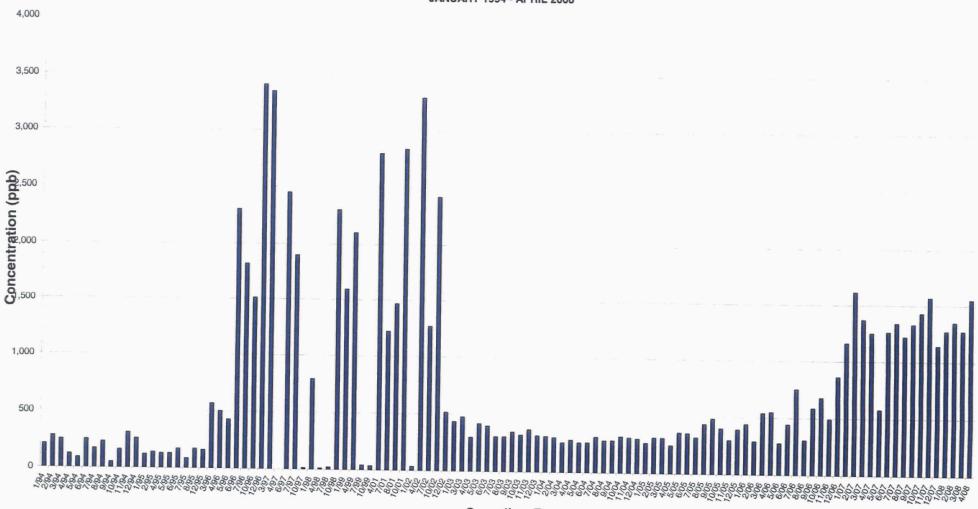


FIGURE 17 SHIELDALLOY METALLURGICAL CORPORATION NEWFIELD, NJ TOTAL CHROMIUM CONCENTRATIONS IN DEEP MONITORING WELL SC2D(R) APRIL 1999 - APRIL 2008



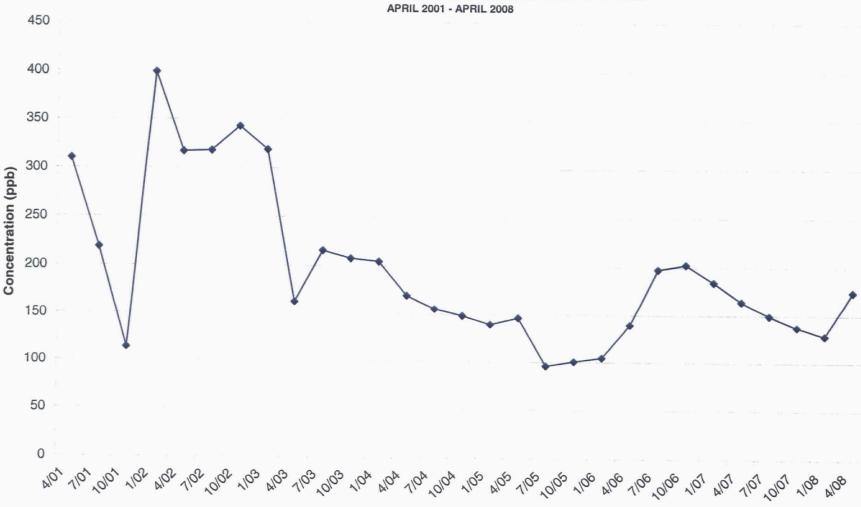
Sampling Event

FIGURE 18 SHIELDALLOY METALLURGICAL CORPORATION NEWFIELD, NJ TOTAL CHROMIUM CONCENTRATIONS IN DEEP MONITORING WELL SC5D JANUARY 1994 - APRIL 2008



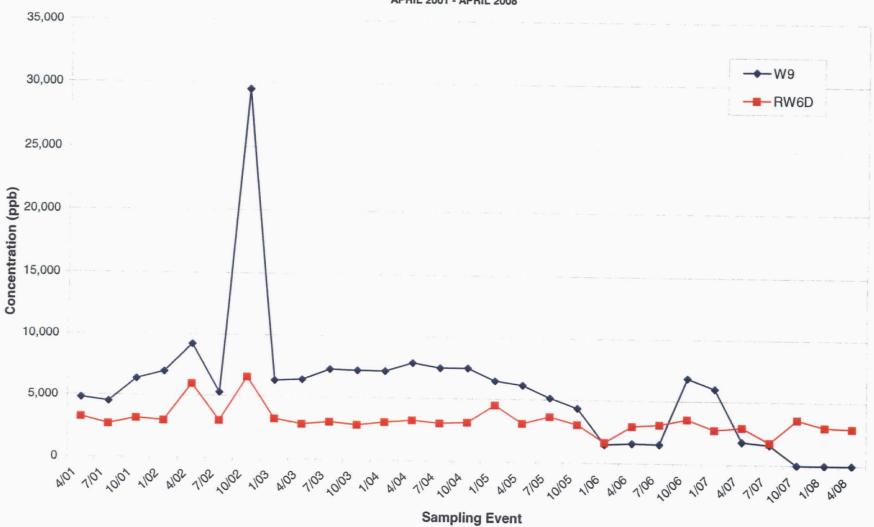
Sampling Event

FIGURE 19 SHIELDALLOY METALLURGICAL CORPORATION NEWFIELD, NJ TOTAL CHROMIUM CONCENTRATIONS IN DEEP MONITORING WELL SC-28D



Sampling Event

FIGURE 20
SHIELDALLOY METALLURGICAL CORPORATION
NEWFIELD, NJ
TOTAL CHROMIUM CONCENTRATIONS IN DEEP EXTRACTION WELLS
APRIL 2001 - APRIL 2008



APPENDIX A Extraction Well Operation Data Filter Press Waste Data

	RIW2					I								
Date		12:00mid	1:00am	2:00am	3:00am	4:00am	5:00am	6:00am	7:00am	8:00am	9:00am	10:00am	11:00am	12:00noon
02/01/08	258,540	179	179	178	179	179	179	179	179	179	179	. 179	179	180
02/02/08	257,760	179	179	179	180	179	180	179	180	179	179	179	180	179
02/03/08	258,540	180	178	180	179	179	178	179	180	179	180	180	180	179
02/04/08	204,960	179	180	179	179	180	179	179	180	179	179	0	0	0
02/05/08	259,620	181	180	181	180	180	180	180	180	180	180	181	181	180
02/06/08	260,400	180	180	180	180	182	181	181	176	181	180	181	182	182
02/07/08	259,860	181	181	181	182	181	181	181	180	180	181	180	180	181
02/08/08	259,200	180	179	181	181	180	180	180	179	179	179	180	181	180
02/09/08	259,020	179	179	180	179	180	180	179	180	179	179	179	182	180
02/10/08	258,600	179	181	181	180	180	180	180	175	180	179	180	180	180
02/11/08	256,980	180	180	180	179	179	178	179	180	178	178	178	178	178
02/12/08	257,640	179	179	178	179	179	180	180	180	180	178	180	179	180
02/13/08	205,320	179	180	180	179	180	180	179	0	181	0	0	0	0
02/14/08	258,900	180	179	180	180	180	181	180	180	178	180	179	179	179
02/15/08	226,920	180	179	179	179	179	179	180	179	179	0	0	0	180
02/16/08	259,560	180	181	181	180	180	180	180	180	180	180	181	181	180
02/17/08	260,100	181	179	181	181	181	180	180	181	180	180	179	179	182
02/18/08	217,080	182	181	181	182	181	180	180	180	182	0	0	0	0
02/19/08	256,260	181	175	179	179	180	179	180	174	180	180	180	180	174
02/20/08	254,220	175	176	175	174	174	179	179	180	179	176	174	175	174
02/21/08	254,700	173	179	180	174	173	174	174	180	179	179	179	180	174
02/22/08	255,780	179	179	174	180	179	174	175	175	174	179	175	179	180
02/23/08	253,740	173	174	175	175	175	174	180	181	179	175	175	174	175
02/24/08	252,900	175	174	175	175	174	173	174	175	179	178	175	175	176
02/25/08	202,140	180	180	180	181	179	179	179	181	180	0	0	0	0
02/26/08	255,720	175	175	175	180	180	176	175	177	176	176	177	181	177
02/27/08	244,020	177	177	176	177	178	177	176	180	176	175	176	0	176
02/28/08	211,560	0	0	0	0	179	176	176	180	179	179	175	175	175
02/29/08	200,880	0	0	0	0	175	174	179	174	175	175	175	176	175
Well Total	7,120,920													
System Total	10.398.600													
System rotal	10,330,000										······································			
Average	170.52													

	RIW2											
Date	1:00pm	2:00pm	3:00pm	4:00pm	5:00pm	6:00pm	7:00pm	8:00pm	9:00pm	10:00pm	11:00pm	***************************************
02/01/08	180	179	180	180	180	181	180	180	180	181	181	
02/02/08	180	179	179	174	174	180	180	180	180	180	179	
02/03/08	179	180	179	180	180	180	182	181	179	179	179	
02/04/08	0	0	180	180	180	181	181	181	181	179	180	
02/05/08	181	181	180	182	182	181	180	180	182	175	179	
02/06/08	181	181	181	182	181	181	182	181	181	182	181	
02/07/08	181	180	181	180	180	180	180	180	180	179	180	
02/08/08	180	180	179	181	180	180	180	181	180	180	180	
02/09/08	180	180	181	181	180	180	181	180	179	180	180	
02/10/08	180	181	179	180	180	179	178	180	180	179	179	
02/11/08	178	179	179	178	173	179	178	178	178	180	178	
02/12/08	174	179	180	179	179	173	180	179	180	180	180	
02/13/08	181	181	181	180	180	180	180	180	181	180	180	
02/14/08	181	179	180	180	180	181	180	180	180	179	180	
02/15/08	179	181	180	181	181	182	182	181	181	180	181	
02/16/08	180	180	180	180	180	181	180	180	181	180	180	
02/17/08	180	180	181	181	181	182	181	181	182	181	181	
02/18/08	182	182	183	183	181	181	180	181	182	175	179	
02/19/08	175	182	180	180	174	175	175	181	175	179	174	
02/20/08	174	176	176	179	175	175	179	180	179	180	174	
02/21/08	179	180	174	179	180	174	175	176	177	178	175	
02/22/08	179	180 -	180	179	175	181	179	180	174	179	175	
02/23/08	175	175	174	174	180	175	175	178	178	180	180	
02/24/08	176	174	175	174	176	181	175	- 179	174	174	179	
02/25/08	0	175	175	176	175	175	175	175	175	174	175	
02/26/08	177	181	176	177	182	181	181	177	177	176	177	
02/27/08	176	176	175	176	175	176	177	176	180	180	179	
02/28/08	176	176	175	176	176	177	175	176	175	175	175	
02/29/08	175	0	178	177	176	176	176	175	176	180	181	
Well Total												
System Total												
Average												

	RW6D								T			T	I	
Date		12:00mid	1:00am	2:00am	3:00am	4:00am	5:00am	6:00am	7:00am	8:00am	9:00am	10:00am	11:00am	12:00noon
02/01/08	81,060	71	71	71	72	71	72	71	71	71	71	71	0	71
02/02/08	85,500	71	71	71	71	71	71	71	0	71	71	73	72	71
02/03/08	94,380	71	72	72	72	72	71	71	71	72	71	71	72 [,]	71
02/04/08	68,460	71	72	71	72	71	71	71	71	71	72	0	0	0
02/05/08	86,520	0	71	72	71	72	72	72	71	72	72	72	72	72
02/06/08	99,120	72	72	72	71	71	72	72	72	72	71	72	71	0
02/07/08	98,940	72	72	72	72	72	72	72	72	72	71	71	71	72
02/08/08	77,160	71	0	0	72	72	71	0	0	71	71	71	71	0
02/09/08	77,280	71	0	0	72	73	73	0	0	71	71	71	0	71
02/10/08	81,840	71	0	0	73	73	73	72	0	74	71	71	71	71
02/11/08	93,240	73	72	72	73	0	70	71	71	70	70	70	70	70
02/12/08	81,120	70	0	73	72	71	72	72	0	0	72	72	72	72
02/13/08	80,940	70	71	70	71	72	71	71	0	71	0	0	0	0
02/14/08	77,160	71	71	71	71	71	72	0	72	71	71	76	72	71
02/15/08	47,040	71	71	71	71	71	71	72	72	71	0	0	0	72
02/16/08	33,900	0	0	. 0	0	0	0	0	0	0	0	0	0	0
02/17/08	80,880	0	0	70	70	71	70	0	70	72	72	0	71	0
02/18/08	64,980	0	73	73	72	72	0	71	72	0	0	00	0	0
02/19/08	81,060	71	71	0	72	72	0	71	71	00	71	71	71	71
02/20/08	76,800	70	71	0	0	0	0	0	74	72	0	70	71	71
02/21/08	72,600	70	71	0	71	71	71	71	0	71	0	71	71	0
02/22/08	42,840	70	73	0	0	0	0	0	0	73	0	0	71	0
02/23/08	93,360	71	70	70	74	71	70	70	71	72	71	70	70	71
02/24/08	80,940	71	71	70	70	71	70	71	71	71	71	71	72	72
02/25/08	76,320	70	71	71	70	70	70	71	70	71	0	0	0	0
02/26/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/27/08	4,500	0	0	0	00	0	00	0	0	0	0	0	75	0
02/28/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/29/08	4,260	0	0	0	0	0	0	0	0	0	0	0	0	0
Well Total	1,942,200									**************************************				
System Total						***************************************								
Average	46.51									•				

	RW6D						T					
Date	1:00pm	2:00pm	3:00pm	4:00pm	5:00pm	6:00pm	7:00pm	8:00pm	9:00pm	10:00pm	11:00pm	
02/01/08	72	71	71	71	71	0	0	71	0	0	70	
02/02/08	71	72	0	71	72	71	0	0	71	71	71	
02/03/08	72	71	72	72	72	72	0	0	71	71	71	
02/04/08	0	0	71	71	71	0	0	72	71	72	0	
02/05/08	72	72	72	0	72	73	72	0	0	75	73	
02/06/08	72	72	72	72	72	72	72	72	72	72	72	
02/07/08	71	72	0	72	71	72	71	71	71	72	73	
02/08/08	71	71	71	0	72	72	72	72	72	71	72	
02/09/08	71	72	0	72	71	71	71	72	71	72	72	
02/10/08	71	71	73	71	71	71	71	0	0	73	72	*************
02/11/08	70	70	70	70	70	70	71	70	70	0	71	
02/12/08	71	70	71	70	70	70	0	72	70	70	0	· · · · · · · · · · · · · · · · · · ·
02/13/08	71	72	71	71	71	71	71	71	71	. 71	71	
02/14/08	71	71	71	71	71	71	0	0	0	0	0	
02/15/08	71	0	0	0	0	0	0	0	0	0	0	
02/16/08	0	0	0	71	71	71	71	70	71	70	70	
02/17/08	71	71	71	71	71	71	71	71	71	71	72	
02/18/08	72	72	0	0	77	72	72	72	71	71	71	
02/19/08	0	0	71	71	71	71	71	71	71	71	71	
02/20/08	71	71	72	70	71	71	72	71	71	70	71	
02/21/08	71	71	71	71	0	0	72	73	71	72	0	
02/22/08	71	0	0	72	0	0	71	71	71	0	71	
02/23/08	71	71	71	70	. 0	70	71	71	0	70	70	
02/24/08	72	71	71	71	0	0	0	0	71	71	0	
02/25/08	0	70	71	0	71	71	71	71	71	71	71	
02/26/08	0	0	0	0	0	0	0	0	0	0	0	
02/27/08	0	0	0	0	0	0	0	0	0	0	0	
02/28/08	0	0	0	0	0	0	0	0	0	0	0	
02/29/08	0	71	0	0	0	0	0	0	0	0	0	
Well Total												
System Total												
Average											-11-11-11-11-11-11-11-11-11-11-11-11-11	

	RW6S	T										[
Date		12:00mid	1:00am	2:00am	3:00am	4:00am	5:00am	6:00am	7:00am	8:00am	9:00am	10:00am	11:00am	12:00noon
02/01/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/02/08	0	0	. 0	0	0	0	0	0	0	0	0	0	0	0
02/03/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/04/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/05/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/06/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0 /
02/07/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/08/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/09/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/10/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/11/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/12/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/13/08	0	0	0	0	0	0	0	00	0	0	0	0	0	00
02/14/08	10,140	0	0	0	0	0	0	0	0	0	0	0	0	0
02/15/08	0	0	0	0	0	0	0	0	0	0	00	0	0	0
02/16/08	43,800	57	56	56	0	0	56	56	56	56	0	57	56	56
02/17/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/18/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/19/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/20/08	13,380	0	0	0	56	55	56	56	0	0	0	0	0	0
02/21/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/22/08	16,740	0	00	56	56	55	56	56	0	0	0	0	0	0
02/23/08	00	0	00	0	0	0	0	0	0	0	0	0	0	0
02/24/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/25/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/26/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/27/08	3,420	0	0	0	0	0	0	0	0	0	0	0	0	57
02/28/08	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/29/08	3,360	0	0	0	0	0	0	0	0	0	0	0	0	0
Well Total	90,840													
System Total														
Average	2.18											- Marian and American		

	RW6S									1		
Date	1:00pm	2:00pm	3:00pm	4:00pm	5:00pm	6:00pm	7:00pm	8:00pm	9:00pm	10:00pm	11:00pm	
02/01/08	0	0	0	0	0	0	0	0	0	0	0	
02/02/08	0	0	0	0	0	0	0	0	0	0	0	
02/03/08	0	0	0	0	0	0	0	0	0	0	0	
02/04/08	0	0	0	0	0	0	0	0	0	0	0	
02/05/08	0	0	0	0	0	0	0	0	0	0	0	
02/06/08	0	0	0	0	0	0	0	0	0	. 0	0.	
02/07/08	0	0	0	0	0	0	0	0	0	0	0	
02/08/08	0	0	0	0	0	0	0	0	0	0	0	
02/09/08	0	0	0	0	0	0	0	0	0	0	0	
02/10/08	0	0	0	0	0	0	0	0	0	0	0	
02/11/08	0	0	0	0	0	0	0	0	0	0	0	
02/12/08	0	0	0	0	0	0	0	0	0	0	0	
02/13/08	0	0	0	0	0	0	0	0	0	0	0	
02/14/08	0	0	0	0	0	0	0	58	56	55	0	
02/15/08	0	0	0	0	0	0	0	0	0	0	0	
02/16/08	56	56	56	0	0	0	0	0	0	0	0	
02/17/08	0	0	0	0	0	0	0	0	0	0	0	
02/18/08	0	0	0	0	0	0	0	0	0	0	0	
02/19/08	0	0	0	0	0	0	0	0	0	0	0	
02/20/08	0	0	0	0	0	0	0	0	0	0	0	Į.
02/21/08	0	0	0	0	0	0	0	0	0	0	0	
02/22/08	0	0	0	0	0	0	0	0	0	0	0	
02/23/08	0	0	00	0	0	0	0	0	0	0	0	
02/24/08	0	0	0	0	0	0	0	0	0	0	0	
02/25/08	0	0	0	0	0	0	0	0	0	0	0	
02/26/08	0	0	0	0	0	0	0	0	0	0	0	
02/27/08	0	0	0	0	0	0	0	0	0	0	0	
02/28/08	0	0	0	0	0	0	0	0	0	0	0	
02/29/08	0	56	0	0	00	0	0	0	0	0	0	
Well Total												
System Total						***************************************						
Average												

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Date		12:00mid	1:00am	2:00am	3:00am	4:00am	5:00am	6:00am	7:00am	8:00am	9:00am	10:00am	11:00am	12:00noon
02/01/08	41,100	32	32	32	0	0	0	32	33	33	32	33	32	32
02/02/08	45,180	0	32	33	32	33	33	33	33	33	33	34	33	32
02/03/08	46,560	33	33	32	32	32	32	32	31	31	31	33	33	32
02/04/08	37,440	32	33	32	33	33	33	33	33	33	33	0	0	0
02/05/08	47,460	32	33	33	33	33	33	33	33	33	33	33	33	32
02/06/08	47,220	32	33	32	34	33	32	33	33	32	32	33	32	33
02/07/08	44,640	33	32	33	32	33	32	32	32	32	32	32	32	32
02/08/08	40,740	31	33	32 ·	32	32	32	32	32	32	32	0	0	0
02/09/08	46,920	33	34	34	33	33	32	33	33	32	32	33	32	30
02/10/08	47,880	33	34	32	34	34	33	33	33	32	33	35	34	34
02/11/08	45,540	33	33	32	32	32	31	32	32	31	31	. 32	32	31
02/12/08	45,540	31	31	31	31	30	30	33	33	32	31	32	32	33
02/13/08	31,260	34	33	32	33	33	33	0	0	0	0	0	0	0
02/14/08	46,200	33	33	33	32	32	33	31	33	32	31	31	32	31
02/15/08	39,120	32	32	33	33	32	, 32	32	32	32	0	0	0	32
02/16/08	41,520	33	33	32	33	34	32	33	33	33	32	34	33	33
02/17/08	45,420	32	33	33	33	33	32	33	33	33	33	32	33	0
02/18/08	39,540	33	33	33	33	33	33	33	33	33	0	0	0	0
02/19/08	47,100	32	34	34	33	33	33	32	31	32	33	33	32	33
02/20/08	46,260	32	33	32	32	31	33	32	32	32	31	33	34	32
02/21/08	46,140	33	32	33	32	32	33	33	31	34	32	32	32	31
02/22/08	44,280	32	31	33	32	32	32	31	31	32	32	33	31	33
02/23/08	46,380	32	31	33	32	32	32	31	32	32	32	31	32	32
02/24/08	45,840	31	31	32	31	31	31	31	33	30	31	32	32	32
02/25/08	28,740	31	32	32	31	31	32	33	30	32	0	00	0	0
02/26/08	46,800	32	31	31	32	32	32	32	33	33	32	33	31	32
02/27/08	44,220	31	32	31	33	33	32	33	32	32	32	33	0	33
02/28/08	36,600	0	0	0	0	31	33	31	31	31	0	32	32	32
02/29/08	33,000	0	0	0	0	32	0	0	32	32	32	31	31	32
Well Total	1,244,640		at the district of the second of the second	ntonia matematika maran	manufacturi biran adaram maka tasiba ana	Marian van amerikan ang kananan kananan kananan kananan kananan kananan kananan kananan kananan kananan kanana	Anna de la companya d	wanten et Annan van et annan van et annan van et annan van et annan van et annan van et annan van et annan van						
System Total														
Average	29.80					A		matical desirement and the second an						

	LAYNE											
Date	1:00pm	2:00pm	3:00pm	4:00pm	5:00pm	6:00pm	7:00pm	8:00pm	9:00pm	10:00pm	11:00pm	
02/01/08	33	31	33	33	32	34	33	33	33	34	33	
02/02/08	32	32	33	32	33	33	34	34	32	32	32	
02/03/08	33	31	32	32	32	33	33	33	34	33	33	
02/04/08	0	0	33	33	33	34	32	32	33	33	33	
02/05/08	34	33	33	34	33	32	33	33	33	33	33	
02/06/08	33	34	34	34	33	31	33	32	33	34	32	
02/07/08	32	0	33	33	32	33	32	32	33	33	32	
02/08/08	32	33	32	33	33	33	32	33_	32	32	34	
02/09/08	33	32	32	33	33	32	33	33	32	33	32	
02/10/08	33	34	33	33	32	31	33	34	34	34	33	
02/11/08	30	32	31	30	33	30	33	32	31	31	32	
02/12/08	31	32	32	31	32	31	32	32	31	31	34	
02/13/08	0	32	33	31	32	33	33	32	32	32	33	
02/14/08	33	32	32	33	33	31	31	32	32	32	32	-
02/15/08	0	32	33	34	33	33	33	33	33	33	33	
02/16/08	0	0	0	34	34	32	33	33	33	32	33	
02/17/08	34	34	34	33	33	32	33	34	31	33	33	
02/18/08	33	32	33	33	35	33	32	33	33	32	33	
02/19/08	34	32	32	33	32	32	33	34	32	34	32	
02/20/08	32	32	31	32	32	31	33	32	32	32	33	
02/21/08	31	33	31	32	31	32	33	33	31	31	31	
02/22/08	33	30	31	34	32	0	31	33	33	33	33	
02/23/08	32	33	33	33	33	32	32	32	33	33	33	
02/24/08	32	32	33	33	32	32	31	32	33	33	33	
02/25/08	0	33	32	32	0	0	0	33	0	33	32	
02/26/08	32	34	33	34	33	34	33	32	33	33	33	
02/27/08	- 32	31	32	32	32	32	34	33	31	30	31	
02/28/08	32	32	32	33	33	33	33	33	32	32	32	
02/29/08	34	0	33	32	33	32	32	32	33	33	34	
Well Total				,								
System Total												
Cystem rotal							······································					
Average												

	W9											1		
Date		12:00mid	1:00am	2:00am	3:00am	4:00am	5:00am	6:00am	7:00am	8:00am	9:00am	10:00am	11:00am	12:00noon
02/01/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/02/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/03/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/04/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/05/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/06/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/07/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/08/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/09/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/10/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/11/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/12/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/13/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/14/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/15/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/16/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/17/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/18/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/19/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/20/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/21/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/22/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/23/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/24/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/25/08	00	0	0 -	0	0	0	0	0	0	0	00	0	00	0
02/26/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/27/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/28/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02/29/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Well Total	0										100000000000000000000000000000000000000			
System Total														
Average	0.00													

	W9							[Ī		
Date	1:00pm	2:00pm	3:00pm	4:00pm	5:00pm	6:00pm	7:00pm	8:00pm	9:00pm	10:00pm	11:00pm
02/01/08	0	0	0	0	o o	0	0	o o	0	0	0
02/02/08	0	0	0	0	0	0	0	0	0	0	0
02/03/08	0	0	0	0	0	0	0	0	0	0	0
02/04/08	0	0	0	0	0	0	0	0	0	0	0
02/05/08	0	0	0	0	0	0	0	0	0	0	0
02/06/08	0	0	0	0	0	0	0	0	0	0	0
02/07/08	0	0	0	0	0	0	0	0	0	0	0
02/08/08	0	0	0	0	0	0	0	0	0	0	0
02/09/08	0	0	0	0	0	0	0	0	0	0	0
02/10/08	0	0	0	0	0	0	0	0	0	0	0
02/11/08	0	0	0	0	0	0	0	0	0	0	0
02/12/08	0	0	0	0	0	0	0	0	0	0 .	0
02/13/08	0	0	0	0	0	0	0	0	0	0	0
02/14/08	0	0	0	0	0	0	0	0	0	0	0
02/15/08	0	O	0	0	0	0	0	0	0	0	0
02/16/08	0	0	0	0	0	0	0	0	0	0	0
02/17/08	0	0	0	0	0	0	0	0	0	0	0
02/18/08	0	0	0	0	0	0	0	0	0	0	0
02/19/08	0	0	0	0	0	0	0	0	0	0	0
02/20/08	0	0	0	0	0	0	0	0	0	0	0
02/21/08	0	0	0	0	0	0	0	0	0	0	0
02/22/08	0	0	0	0	0	0	0	0	0	0	0
02/23/08	0	0	0	0	0	0	0	0	0	0	0
02/24/08	0	0	0	0	0	0	0	0	0	0	0
02/25/08	0	0	0	0	0	0	0	0	0	0	0
02/26/08	0	0	0	0	0	0	0	0	0	0	0
02/27/08	0	0	0	0	0	0	0	0	0	0	0
02/28/08	0	0	0	0	0	0	0	0	0	0	0
02/29/08	0	0	0	0	0	0	0	0	0	0	0
Well Total											
System Total											
Average											

	RIW2							<u> </u>	I		1			
Date		12:00mid	1:00am	2:00am	3:00am	4:00am	5:00am	6:00am	7:00am	8:00am	9:00am	10:00am	11:00am	12:00noon
03/01/08	169,500	0	0	0	0	0	0	0	0	177	176	176	177	176
03/02/08	256,020	176	181	176	176	176	176	180	180	180	175	176	176	176
03/03/08	151,080	181	180	180	180	181	181	181	0	177	0	0	0	0
03/04/08	258,420	178	179	180	182	181	180	179	178	176	178	177	179	176
03/05/08	259,500	182	182	181	182	180	180	182	180	181	181	180	180	181
03/06/08	216,300	176	182	182	181	0	0	0	0	180	175	180	181	180
03/07/08	247,680	176	179	181	180	180	181	182	182	182	0	177	177	181
03/08/08	257,520	182	182	177	178	177	178	176	178	177	178	178	178	177
03/09/08	259,140	180	176	176	177	176	177	178	178	182	181	182	181	180
03/10/08	129,540	181	181	182	182	181	180	181	0	0	0	0	0	0
03/11/08	255,420	176	177	175	181	181	175	176	181	175	181	176	177	177
03/12/08	180,840	176	182	176	176	176	176	175	177	176	176	177	177	176
03/13/08	245,880	177	0	176	176	175	181	175	180	176	176	177	181	180
03/14/08	139,140	0	0	0	0	0	0	0	0	0	0	0	178	176
03/15/08	255,480	176	176	176	178	176	177	176	178	175	176	176	176	181
03/16/08	257,040	181	176	177	176	182	177	176	176	181	181	177	176	177
03/17/08	160,500	181	181	182	181	181	175	180	176	0	0	0	0	0
03/18/08	254,820	176	176	176	180	175	175	175	176	181	181	176	176	177
03/19/08	256,860	176	176	181	181	181	180	180	183	176	176	181	177	176
03/20/08	255,660	182	177	178	179	180	176	176	176	178	177	176	181	181
03/21/08	253,740	176	175	175	176	177	175	175	180	176	175	175	176	176
03/22/08	254,760	176	176	177	177	177	178	179	177	177	175	176	176	176
03/23/08	253,800	176	177	176	176	175	176	176	176	177	176	175	176	176
03/24/08	84,420	176	176	175	176	177	176	175	176	0	0	0	0	0
03/25/08	0	0	0	0	0	0	0	0	0	0	0	0	0 ·	0
03/26/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/27/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/28/08	138,120	0	0	0	0	0	0	00	0	00	0	0	178	170
03/29/08	243,780	177	176	175	176	179	179	178	177	175	175	180	180	175
03/30/08	255,840	176	175	176	177	177	179	178	177	176	177	180	176	176
03/31/08	213,420	176	175	175	181	181	180	181	181	0	0	0	0	176
Well Total	6,164,220													
System Total	9,193,080													
Average	138.09													

	RIW2											
Date	1:00pm	2:00pm	3:00pm	4:00pm	5:00pm	6:00pm	7:00pm	8:00pm	9:00pm	10:00pm	11:00pm	
03/01/08	176	176	177	176	177	177	176	177	178	176	177	
03/02/08	177	177	176	177	181	178	181	181	181	177	177	
03/03/08	0	0	0	0	179	177	177	180	182	182	0	
03/04/08	180	187	176	181	181	180	181	181	181	180	176	
03/05/08	181	176	181	177	177	181	181	181	178	180	180	
03/06/08	180	182	182	179	181	183	181	181	181	177	181	
03/07/08	181	182	182	181	176	177	181	176	176	176	182	
03/08/08	182	179	177	177	177	178	182	182	180	181	181	
03/09/08	180	181	182	182	183	181	181	181	181	182	181	
03/10/08	0	0	0	0	0	0	181	177	182	175	176	
03/11/08	175	177	176	178	177	178	177	177	176	176	182	
03/12/08	181	181	180	176	0	0	0	0	0	0	0	
03/13/08	176	176	182	176	177	183	182	182	177	178	179	
03/14/08	177	176	177	182	182	183	176	177	176	177	182	
03/15/08	177	176	179	181	177	182	177	176	182	176	178	
03/16/08	183	176	181	176	175	181	181	182	180	180	176	
03/17/08	0	0	0	0	183	175	176	176	176	176	176	
03/18/08	176	175	176	176	176	177	176	177	177	180	181	
03/19/08	177	180	182	177	176	178	178	177	177	177	178	
03/20/08	180	177	176	176	176	177	177	176	177	177	175	
03/21/08	176	177	176	177	175	177	176	177	178	177	176	
03/22/08	177	177	177	178	176	178	178	176	176	181	175	
03/23/08	178	177	176	176	176	178	176	177	176	176	176	
03/24/08	0	0	0	0	0	0	0	0	0	0	0	
03/25/08	0	0	0	0	0	0	0	0	0	0	0	
03/26/08	0	0	0	0	0	0	0	0	0	0	0	
03/27/08	0	0	0	0	0	0	0	0	0	0	0	
03/28/08	181	177	177	178	181	178	177	177	175	177	176	
03/29/08	177	176	175	175	໌ 176	176	177	176	177	176	0	
03/30/08	180	181	176	181	181	181	177	1 81	175	175	176	
03/31/08	175	176	182	176	176	176	175	181	177	176	181	
Well Total												
System Total							Territoria de la compania de la compania de la compania de la compania de la compania de la compania de la comp		animika saad uulikekto iitti Piitoke sir.			
Average												

	RW6D	T							T			1		
Date		12:00mid	1:00am	2:00am	3:00am	4:00am	5:00am	6:00am	7:00am	8:00am	9:00am	10:00am	11:00am	12:00noon
03/01/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/02/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/03/08	26,040	0	0	0	0	0	0	0	72	0	0	0	0	0
03/04/08	51,060	0	0	0	0	0	0	0	0	0	0	0	0	71
03/05/08	85,920	72	0	70	72	72	72	72	71	72	72	72	70	0
03/06/08	68,640	71	71	0	72	0	0	0	0	71	71	72	71	71
03/07/08	85,440	71	72	0	72	72	72	72	0	71	0	71	71	71
03/08/08	99,600	71	71	77	73	73	72	72	72	72	72	72	72	72
03/09/08	90,300	71	72	72	72	71	72	72	73	0	0	73	72	71
03/10/08	47,520	72	72	72	72	72	72	71	0	0	0	0	0	0
03/11/08	99,300	72	72	72	71	72	72	72	72	72	72	72	72	72
03/12/08	69,240	72	72	72	72	73	72	72	0	72	72	72	73	72
03/13/08	69,060	73	0	72	72	71	71	72	71	71	71	72	72	72
03/14/08	47,700	0	0	0	0	0	0	0	0	. 0	0	0	74	72
03/15/08	82,140	72	71	72	72	72	72	72	0 .	73	72	72	71	72
03/16/08	90,120	72	72	71	72	71	71	71	72	72	71	71	71	71
03/17/08	51,120	71	71	0	71	71	71	71	0	0	0	0	0	0
03/18/08	98,580	71	0	71	72	71	71	71	71	71	71	71	72	72
03/19/08	90,540	71	0	71	71	72	72	71	0	71	71	71	72	73
03/20/08	94,680	72	0	72	72	72	72	72	71	0	72	71	72	72
03/21/08	90,120	71	71	71	71	72	71	71	0	0	75	71	71	71
03/22/08	81,300	71	0	71	71	71	72	72	0	0	73	71	71	71
03/23/08	81,600	71	0	73	73	73	72	71	0	0	74	71	71	71
03/24/08	34,320	71	71	71	72	72	72	71	72	0	0	0	0	0
03/25/08	0	0	00	0	0	0	0	0	0	0	0	0	0	0
03/26/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/27/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/28/08	51,660	0	0	00	0	0	0	0	0	0	0	0	73	77
03/29/08	77,340	0	76	73	71	0	72	72	0	71	71	71	71	71
03/30/08	85,320	70	0	71	71	71	72	72	73	0	0	70	71	71
03/31/08	85,080	72	71	71	71	71	71	71	71	0	0	0	0	71
Well Total	1,933,740													
System Total														ner at particular de came e reas modificar de mandre de mener de mener de la mener de la mener de la mener de m
Average	43.32													

	RW6D			·								
Date	1:00pm	2:00pm	3:00pm	4:00pm	5:00pm	6:00pm	7:00pm	8:00pm	9:00pm	10:00pm	11:00pm	
03/01/08	0	0	0	0	0	0	0	0	0	0	0	
03/02/08	0	0	0	0	0	0	Ō	0	0	0	0	
03/03/08	72	72	73	73	0	0	0	0	0	0	72	
03/04/08	71	71	71	71	71	71	71	71	70	71	71	
03/05/08	0	71	72	72	72	72	72	0	73	71	70	
03/06/08	72	0	0	72	72	0	72	72	71	72	71	
03/07/08	71	70	0	71	71	71	71	- 71	71	71	71	(
03/08/08	72	0	72	71	72	72	72	72	72	72	72	
03/09/08	71	71	72	71	71	71	71	72	72	0	72	
03/10/08	0	0	0	0	0	0	72	73	0	72	72	
03/11/08	72	72	72	72	72	72	72	72	72	72	0	
03/12/08	72	72	72	72	0	0	0	0	0	0	0	
03/13/08	72	72	75	72	0	0	0	0	0	0	0	
03/14/08	72	72	72	72	0	73	72	. 72	72	72	0	
03/15/08	0	72	0	72	0	72	73	73	72	72	0	
03/16/08	0	72	71	72	72	71	71	0	73	0	72	
03/17/08	0	0	0	0	0	71	71	71	71	71	71	
03/18/08	71	71	72	71	71	71	72	72	71	75	71	
03/19/08	72	0	72	72	72	72	72	72	73	74	72	
03/20/08	72	71	72	71	72	, 72	72	71	72	72	71	
03/21/08	71	0	74	71	71	71	71	71	72	72	72	
03/22/08	0	72	72	71	71	0	71	71	71	71	71	
03/23/08	0	71	71	71	71	0	72	71	71	71	71	
03/24/08	0	0	0	0	0	0	0	0	0	0	0	
03/25/08	0	0	0	0	0	0	0	0	0	0	0	
03/26/08	0	0	0	0	0	0	0	0	0	0	0	
03/27/08	0	0	0	0 .	0	0	0	0	0	0	0	·
03/28/08	70	71	71	71	71	0	74	71	71	71	70	
03/29/08	0	71	71	72	71	71	71	72	0	71	0	
03/30/08	71	71	71	71	71	71	0	71	71	71	71	
03/31/08	71	71	70	70	71	71	71	70	71	71	71	
Well Total												
System Total												
Average												

	RW6S											T		T
Date		12:00mid	1:00am	2:00am	3:00am	4:00am	5:00am	6:00am	7:00am	8:00am	9:00am	10:00am	11:00am	12:00noon
03/01/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/02/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/03/08	17,100	0	0	0	0	0	0	0	0	0	0	0	0	0
03/04/08	40,380	0	0	0	0	0	0	0	0	0	0	0	0	56
03/05/08	40,440	57	56	56	57	56	57	56	56	0	0	0	55	57
03/06/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/07/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/08/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/09/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/10/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/11/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/12/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/13/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/14/08	0	0	0	0	0	0	0	0	0	0	O	0	0	0
03/15/08	0	0	0	0	0	0	0	0	0	0	0	0	0	, o
03/16/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/17/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/18/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/19/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/20/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/21/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/22/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/23/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/24/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/25/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/26/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/27/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/28/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/29/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/31/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Well Total	97,920													
System Total														
Average	2.19													

	RW6S						,			1		
Date	1:00pm	2:00pm	3:00pm	4:00pm	5:00pm	6:00pm	7:00pm	8:00pm	9:00pm	10:00pm	11:00pm	
03/01/08	0	0	0	0	0	0	o o	o o	0	0	0	
03/02/08	0	0	0	0	0	0	0	0	0	0	0	
03/03/08	57	57	57	57	0	0	0	0	0	0	57	
03/04/08	56	56	56	56	56	56	56	56	56	56	57	
03/05/08	55	56	0	0	0	0	0	0	0	0	0	
03/06/08	0	0	0	0	0	0	0	0	0	0	0	
03/07/08	0	0	0	0	0	0	0	0	0	0	0	[
03/08/08	0	0	0	0	0	0	0	0	0	0	0	
03/09/08	0	0	0	0	0	0	0	0	0	0	0	
03/10/08	0	0	0	0	0	0	0	0	0	0	0	
03/11/08	0	0	0	0	0	0	0	0	0	0	0	
03/12/08	0	0	0	0	0	0	0	0	0	0	.0	
03/13/08	0	0	0	0	0	0	0	0	0	0	0	
03/14/08	0	0	0	0	0	0	0	0	0	0	0	
03/15/08	0	0	0	0	0	0	0	0	0	0	0	
03/16/08	0	0	0	0	0	0	0	0	0	0	0	
03/17/08	0	0	0	0	0	0	0	0	0	0	0	
03/18/08	0	0	0	0	0	0	0	0	0	0	0	
03/19/08	0	0	0	0	0	0	0	0	0	0	0	
03/20/08	0	0	0	0	0	0	0	0	0	0	0	
03/21/08	0	0	0	0	0	0	0	0	0	0	0	
03/22/08	0	0	0	0	0	0	0	0	0	0	0	
03/23/08	0	0	0	0	0	0	0	0	0	0	0	
03/24/08	0	0	0	0	0	0	0	0	0	0	0	
03/25/08	0	0	0	0	0	0	0	0	0	0	0	
03/26/08	0	0	0	0	0	0	0	0	0	0	0	
03/27/08	0	0	0	0	0	0	0	0	0	0	0	
03/28/08	0	0	0	0	0	0	0	0	0	0	0	
03/29/08	0	0	0	0	0	0	0	0	0	0.	0	
03/30/08	0	0	0	0	0	0	0	0	0	0	0	
03/31/08	0	0	0	0	0	0	0	0	0	0	0	until a manife attitude attitude and a south and attitude of
Well Total												
System Total												
Average												

	LAYNE					- ·			T	1				
Date		12:00mid	1:00am	2:00am	3:00am	4:00am	5:00am	6:00am	7:00am	8:00am	9:00am	10:00am	11:00am	12:00noon
03/01/08	30,900	0	0	0	0	0	0	0	0	31	33	33	32	32
03/02/08	42,600	31	32	0	34	33	32	32	32	32	32	33	33	32
03/03/08	37,080	33	33	32	32	31	32	33	33	32	0	. 0	0	0
03/04/08	23,760	33	33	33	33	33	33	32	33	34	33	33	33	0
03/05/08	23,580	0	0	0	0	0	0	0	0	33	33	33	0	0
03/06/08	37,320	34	32	33	33	0	0	0	0	32	33	32	33	31
03/07/08	44,640	33	33	32	33	32	32	33	33	32	0	33	32	33
03/08/08	47,040	33	31	32	33	32	31	32	33	33	32	33	34	33
03/09/08	46,620	32	32	32	32	32	33	33	33	33	32	32	32	32
03/10/08	9,780	0	0	0	0	0	0	0	0	0	0	0	0	0
03/11/08	46,500	33	32	32	33	32	32	31	32	32	32	32	32	33
03/12/08	33,120	32	33	31	32	32	33	32	32	32	32	32	33	34
03/13/08	7,740	0	0	0	0	0	0	0	0	0	0	0	0	0
03/14/08	15,540	0	00	0	0	0	0	0	0	0	0	0	0	0
03/15/08	44,880	32	33	32	32	33	32	31	33	31	33	32	32	33
03/16/08	46,320	32	33	32	32	32	31	33	32	33	32	32	32	32
03/17/08	29,160	33	32	33	32	31	32	33	31	0	0	0	0	0
03/18/08	45,480	32	34	31	32	31	31	31	31	32	31	31	32	31
03/19/08	42,600	31	0	33	32	32	32	31	33	31	32	33	· 32	33
03/20/08	46,080	32	32	32	32	32	33	33	31	31	32	31	32	32
03/21/08	45,960	32	33	33	33	33	30	30	33	31	33	31	33	32
03/22/08	45,960	32	31	31	31	32	32	32	31	31	32	32	32	32
03/23/08	45,720	32	33	32	32	32	31	32	33	30	32	32	31	31
03/24/08	15,180	32	31	31	32	33	30	32	32	0	0	0	0	0
03/25/08	0	0	00	0	0	0	0	0	0	0	0	0	0	0
03/26/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/27/08	0	0	0	0	00	0	0	0	00	0	0	0	0	0
03/28/08	17,520	0	0	0	0	0	0	0	0	0	0	0	33	0
03/29/08	44,280	31	31	32	32	33	32	31	33	33	32	32	31	31
03/30/08	43,800	32	32	31	31	31	32	32	33	31	32	31	32	31
03/31/08	38,040	31	32	32	31	32	32	31	32	0	0	0	0	33
Well Total	997,200							· - · · · · · · · · · · · · · · · · · ·	•					
System Total							THE COLUMN TWO IS NOT THE COLUMN TWO IS NOT		annum annum annum annum annum annum annum annum annum annum annum annum annum annum annum annum annum annum an					
Average	22.34							•						

	LAYNE											- · ·
Date	1:00pm	2:00pm	3:00pm	4:00pm	5:00pm	6:00pm	7:00pm	8:00pm	9:00pm	10:00pm	11:00pm	
03/01/08	32	32	33	31	33	33	32	32	33	31	32	
03/02/08	31	32	31	32	33	34	33	32	0	32	32	
03/03/08	33	33	33	33	33	32	33	32	31	34	0	
03/04/08	0	0	0	0	0	0	0	0	0	0	0	
03/05/08	0	0	32	33	34	32	33	33	33	32	32	
03/06/08	32	0	33	33	34	33	34	33	33	33	31	
03/07/08	33	31	33	32	30	32	33	33	32	32	32	
03/08/08	33	32	34	33	33	33	33	34	33	31	33	
03/09/08	31	31	33	32	33	32	33	33	33	33	33	
03/10/08	0	0	0	0	0	0	32	33	33	33	32	
03/11/08	32	33	32	33	32	33	32	32	33	33	32	
03/12/08	33	34	33	32	0	0	0	0	0	0	0	
03/13/08	0	0	0	0	0	32	32	32	0	0	33	
03/14/08	0	0	0	32	32	33	33	32	31	33	33	
03/15/08	33	33	0	33	32	33	32	34	33	35	31	
03/16/08	32	33	32	32	30	32	32	34	33	32	32	
03/17/08	0	0	0	0	33	33	32	33	32	33	33	
03/18/08	32	33	31	32	31	32	32	33	31	31	30	
03/19/08	32	0	32	32	33	33	33	33	32	32	33	
03/20/08	31	32	32	33	33	33	33	32	32	30	32	
03/21/08	33	31	31	32	32	30	30	33	32	33	32	, , , , , , , , , , , , , , , , , , ,
03/22/08	33	32	32	33	32	32	32	33	31	33	32	
03/23/08	31	31	32	31	31	33	31	33	31	33	32	
03/24/08	0	0	0	0	0	0	0	0	,O	0	0	
03/25/08	0	0	0	0	0	0	0	0	0	0	0	
03/26/08	0	0	0	0	0	0	0	0	0	0	0	
03/27/08	0	0	0	0	Ö	0	0	0	0	0	0	
03/28/08	32	0	0	0	33	31	33	32	34	32	32	
03/29/08	33	33	33	32	33	31	32	32	32	33	0	
03/30/08	31	0	32	32	32	33	32	32	31	32	32	
03/31/08	32	32	32	31	33	31	32	32	31	31	31	
Well Total												
System Total												
Average												

	W9						· · · · · · · · · · · · · · · · · · ·		T		T			
Date		12:00mid	1:00am	2:00am	3:00am	4:00am	5:00am	6:00am	7:00am	8:00am	9:00am	10:00am	11:00am	12:00noon
03/01/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/02/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/03/08	0	0	0	0	0	O.	0	0	0	0	0	0	0	0
03/04/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/05/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/06/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/07/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/08/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/09/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/10/08	0	0	0	0	0	0	0	. 0	0	0	0	0	0	0
03/11/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0 .
03/12/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/13/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/14/08	0	0	0	0	0	0	0	0	0	. 0	0	0	0	0
03/15/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/16/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/17/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/18/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/19/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/20/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/21/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/22/08	0	0	00	0	0	0	0	0	0	0	0	0	0	0
03/23/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/24/08	0	0	0	0	0	0	00	0	0	0	. 0	0	0	0
03/25/08	0	0	0	0	00	00	0	0	0	0	0	0	0	0
03/26/08	0	0	0	0	0	0	00	0	0	0	0	0	0	0
03/27/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/28/08	0	0	00	0	0	0	0	0	0	0	0	0	0	0
03/29/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03/31/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Well Total	0													
System Total														
Average	0.00													

	W9					T T	[· · · · · · · · · · · · · · · · · · ·				
Date	1:00pm	2:00pm	3:00pm	4:00pm	5:00pm	6:00pm	7:00pm	8:00pm	9:00pm	10:00pm	11:00pm
03/01/08	0	0	0	0	0	0	0	0	0	0	0
03/02/08	0	0	0	0	0	0	0	0	0	0	0
03/03/08	0	0	0	0	0	0	0	0	0	0	0
03/04/08	0	0	0	0	0	0	0	0	0	0	0
03/05/08	0	0	0	0	0	0	0	0	0	0	0
03/06/08	0	0	0	0	0	0	0	0	0	0	0
03/07/08	0	0	0	0	0	0	0	0	0	0	0
03/08/08	0	0	0	0	0	0	0	0	0	0	0
03/09/08	0	0	0	0	0	0	0	0	0	0	0
03/10/08	0	0	0	0	. 0	0	0	0	0	0	0
03/11/08	0	0	0	0	0	0	0	0	0	0	0
03/12/08	0	0	0	0	0	0	0	0	0	0	0
03/13/08	0	0	0	0	0	0	0	0	0	0	0
03/14/08	0	0	0	0	0	0	0	0	0	0	0
03/15/08	0	0	0	0	0	0	0	0	0	0	0
03/16/08	0	0	0	0	0	0	0	0	0	0	0
03/17/08	0	0	0	0	0	0	0	0	0	0	0
03/18/08	0	0	0	0	0	0	0	0	0	0	0
03/19/08	0	0	0	0	0	0	0	0	0	0	0
03/20/08	0	0	0	0	0	0	0	0	0	0	0
03/21/08	0	0	0	0	0	0	0	0	0	0	0
03/22/08	0	0	0	0	0	0	0	0	0	0	0 .
03/23/08	0	0	0	0	0	0	0	0	0	0	0
03/24/08	0	0	0	0	0	0	0	0	0	0	0
03/25/08	0	0	0	0	0	0	0	0	0	0	0
03/26/08	0	0	0	0	0	0	0	0 .	0	0	0
03/27/08	0	0	0	0	0	0	0	0	0	0	0
03/28/08	0	0	0	0	0	0	0	0	0	0	0
03/29/08	0	0	0	0	0	0	0	0	0	0	0
03/30/08	0	0	0	0	0	0	0	0	0	0	0
03/31/08	0	0	0	0	0	0	0	0	0	0	0
Well Total											
System Total											***************************************
Average											

WELL LOG REPORT April, 2008

	RIW2					<u> </u>			[T T	
Date		12:00mid	1:00am	2:00am	3:00am	4:00am	5:00am	6:00am	7:00am	8:00am	9:00am	10:00am	11:00am	12:00noon
04/01/08	259,140	179	179	176	181	181	182	182	181	176	177	176	177	182
04/02/08	256,680	177	177	182	176	181	181	175	176	177	180	177	176	181
04/03/08	256,380	181	175	175	175	181	175	175	175	175	175	181	180	180
04/04/08	259,800	181	182	176	181	181	181	175	181	182	181	182	181	176
04/05/08	259,980	176	176	181	177	176	181	181	181	182	180	180	182	181
04/06/08	247,980	182	182	181	176	181	181	182	181	181	181	176	176	180
04/07/08	257,460	177	175	175	175	180	181	177	177	175	176	182	181	177
04/08/08	259,500	182	182	181	181	182	180	183	182	180	176	181	181	181
04/09/08	169,740	176	177	176	176	177	176	176	0	0	0	0	0	0
04/10/08	255,900	175	177	177	177	176	180	180	180	177	176	176	176	181
04/11/08	256,140	176	176	177	177	177	177	178	177	176	176	181	177	178
04/12/08	255,420	178	178	177	178	177	178	177	179	178	176	176	176	178
04/13/08	254,520	175	177	181	181	175	176	175	181	181	175	177	176	176
04/14/08	253,320	176	176	176	176	175	176	175	176	177	175	175	176	176
04/15/08	211,260	175	175	175	175	176	176	176	174	176	176	177	177	0
04/16/08	242,940	176	176	176	175	174	175	175	175	175	175	176	175	176
04/17/08	160,740	177	176	0	0	0	0	0	177	0	0	0	0	180
04/18/08	256,740	176	177	177	177	180	181	179	177	175	174	176	176	182
04/19/08	256,980	177	176	176	177	177	178	177	175	177	177	176	178	179
04/20/08	246,480	180	181	176	181	176	177	177	181	177	176	175	182	182
04/21/08	159,960	177	177	182	176	177	177	176	176	178	0	0	0	0
04/22/08	254,520	175	178	176	175	178	176	175	1.75	176	176	176	178	178
04/23/08	254,340	176	177	177	175	176	175	177	176	176	176	177	177	177
04/24/08	180,120	178	175	177	176	176	177	178	177	176	176	176	177	176
04/25/08	254,280	177	176	174	175	175	174	173	174	175	175	174	175	176
04/26/08	256,740	181	175	180	175	180	176	176	177	180	180	176	175	181
04/27/08	256,860	180	181	180	175	176	180	180	180	181	180	175	177	181
04/28/08	223,380	174	180	180	180	175	176	175	174	173	175	0	0	0
04/29/08	254,760	178	176	177	177	180	178	177	178	176	180	178	177	175
04/30/08	253,860	177	177	176	178	178	177	176	176	175	175	176	176	176
Well Total	7,225,920											-		
System Total	11,079,660													
Average	167.27													

WELL LOG REPORT April, 2008

	RIW2											
Date	1:00pm	2:00pm	3:00pm	4:00pm	5:00pm	6:00pm	7:00pm	8:00pm	9:00pm	10:00pm	11:00pm	
04/01/08	182	182	183	176	182	178	182	181	181	182	181	
04/02/08	181	175	176	181	182	181	175	175	181	181	174	
04/03/08	181	182	181	182	182	176	176	176	177	176	181	
04/04/08	177	180	181	181	181	183	181	181	181	182	182	
04/05/08	183	181	182	181	182	182	181	181	182	182	182	
04/06/08	183	176	176	176	176	181	182	181	181	181	0	
04/07/08	181	182	182	181	181	182	182	181	177	177	177	
04/08/08	177	181	177	181	181	182	182	182	176	177	177	
04/09/08	0	0	176	176	177	177	176	180	181	176	176	
04/10/08	181	181	176	177	176	177	177	176	178	177	181	
04/11/08	181	176	178	177	177	182	178	178	182	181	176	
04/12/08	177	177	177	176	181	177	181	177	176	176	176	
04/13/08	176	176	176	175	175	176	177	176	177	176	176	
04/14/08	176	176	177	176	175	176	177	177	176	176	175	
04/15/08	0	0	0	176	181	176	176	177	175	176	176	
04/16/08	176	176	177	0	177	177	178	179	177	177	176	
04/17/08	180	177	182	182	178	182	183	177	176	176	176	
04/18/08	177	177	178	183	179	184	180	178	178	177	181	
04/19/08	178	179	184	178	177	183	178	183	179	182	182	
04/20/08	181	181	178	178	178	178	0	179	176	177	181	
04/21/08	0	0	0	0	0	178	177	177	181	177	180	
04/22/08	178	178	177	178	177	177	177	177	177	177	177	
04/23/08	177	177	176	177	176	176	178	178	178	177	177	
04/24/08	176	176	177	178	0	0	0	0	0	0	0	
04/25/08	177	182	181	177	176	176	177	178	180	180	181	
04/26/08	181	181	182	181	180	176	176	176	177	177	180	
04/27/08	175	177	179	176	177	181	181	180	176	176	177	
04/28/08	177	176	176	177	177	178	178	178	180	182	182	
04/29/08	176	176	176	177	176	176	177	176	176	177	176	
04/30/08	177	176	176	177	176	175	177	176	176	176	176	
Well Total												
System Total												
Average												

WELL LOG REPORT April, 2008

	RW6D													
Date		12:00mid	1:00am	2:00am	3:00am	4:00am	5:00am	6:00am	7:00am	8:00am	9:00am	10:00am	11:00am	12:00noon
04/01/08	94,020	71	71	71	71	71	71	71	72	71	72	72	72	71
04/02/08	93,960	72	72	72	71	71	71	71	0	70	71	71	72	70
04/03/08	93,420	0	70	70	70	70	70	70	70	70	71	70	70	71
04/04/08	93,600	71	71	71	71	70	70	71	70	71	70	71	70	71
04/05/08	84,960	70	71	70	70	71	70	70	71	71	70	71	0	70
04/06/08	93,060	70	70	70	70	70	70	71	71	70	71	70	70	71
04/07/08	97,740	0	71	70	71	71	71	75	71	70	70	71	70	70
04/08/08	93,660	70	0	71	71	72	71	0	72	72	70	71	71	70
04/09/08	63,540	70	0	71	70	71	70	71	0	0	0	0	0	0
04/10/08	85,440	71	0	0	72	71	70	70	0	0	· 71	71	70	71
04/11/08	89,280	70	0	71	71	72	72	72	0	70	70	70	71	0
04/12/08	85,140	71	0	71	71	72	72	71	0	0	70	71	71	70
04/13/08	101,100	71	71	71	71	70	70	70	70	70	70	70	70	70
04/14/08	92,940	70	70	70	70	70	70	70	70	0	70	70	70	70
04/15/08	84,960	70	70	73	71	71	70	70	70	70	71	72	71	0
04/16/08	97,440	70	70	70	70	70	70	70	70	70	70	70	71	71
04/17/08	55,980	70	70	0	0	0	0	0	71	0	0	0	0	76
04/18/08	68,400	0	71	0	72	72	72	72	0	70	70	71	71	71
04/19/08	51,240	0	71	71	72	72	72	72	0	0	0	0	0	0
04/20/08	93,060	70	70	70	70	70	70	70	70	70	70	70	71	70
04/21/08	50,640	70	70	70	70	70	70	70	70	70	0	0	0	0
04/22/08	101,280	70	70	70	70	70	70	70	70	70	70	70	70	70
04/23/08	97,140	70	70	70	69	69	69	0	. 70	70	71	70	71	71
04/24/08	67,680	70	70	70	72	70	70	0	70	70	70	70	71	71
04/25/08	92,880	71	0	73	70	70	70	70	70	70	70	71	70	70
04/26/08	96,960	70	70	70	70	70	70	70	70	71	69	. 0	70	70
04/27/08	92,460	70	· 70	70	0	. 0	70	70	70	70	70	70	70	70
04/28/08	88,260	70	69	70	70	70	70	70	.69	70	70	0	0	0
04/29/08	96,780	70	70	70	70	71	71	71	71	69	69	0	70	70
04/30/08	100,860	69	70	70	70	71	70	70	70	69	69	72	70	70
Well Total	2,597,880													
System Total														
Average	60.14													

	RW6D					<u> </u>						
Date	1:00pm	2:00pm	3:00pm	4:00pm	5:00pm	6:00pm	7:00pm	8:00pm	9:00pm	10:00pm	11:00pm	
04/01/08	71	72	71	71	71	71	o o	71	71	71	0	
04/02/08	71	72	72	71	0	72	71	71	71	71	70	
04/03/08	71	71	73	71	71	71	70	70	0	76	71	
04/04/08	71	71	71	71	0	0	71	72	71	72	72	
04/05/08	0	71	71	71	72	72	72	70	0	0	72	
04/06/08	0	71	70	70	70	73	71	71	70	71	0	
04/07/08	71	71	71	70	70	71	70	71	71	70	72	
04/08/08	71	71	71	70	70	71	71	71	71	71	72	
04/09/08	0	0	71	71	71	71 _	71	70	70	71	70	
04/10/08	71	71	71	71	71	74	73	72	71	71	71	
04/11/08	70	71	71	71	71	71	71	71	71	71	70	
04/12/08	71	71	71	0	71	71	71	71	71	71	70	
04/13/08	70	71	70	70	70	70	70	70	70	70	70	
04/14/08	70	70	0	75	70	71	71	70	71	70	71	
04/15/08	0	0	0	70	71	71	71	71	71	71	71	
04/16/08	71	71	0	73	72	71	71	71	71	70	71	
04/17/08	76	71	71	0	71	71	0	74	71	71	70	
04/18/08	71	0	71	0	0	0	0	71	71	74	70	
04/19/08	0	0	0	71	71	0	70	71	0	71	70	
04/20/08	75	72	71	70	70	71	0	0	71	70	70	
04/21/08	0	0	0	0	0	71	0	73	0	70	0	
04/22/08	70	71	73	71	70	70	71	70	70	71	71	
04/23/08	71	71	70	71	70	71	71	71	71	71	71	
04/24/08	71	71	71	71	0	0	0	0	0	0	0	
04/25/08	70	00	71	70	70	70	70	71	70	70	71	
04/26/08	70	70	70	71	71	71	70	70	71	71	71	
04/27/08	70	70	70	70	70	70	70	70	70	70	71	
04/28/08	70	70	70	70	70	71	71	71	70	70	70	
04/29/08	70	69	70	70	70	70	70	70	71	70	71	
04/30/08	70	70	70	69	70	70	70	70	70	71	71	***************************************
Well Total	- 1 = 0								***************************************			
System Total												
Average												

	RW6S								l		<u> </u>	Ţ		
Date		12:00mld	1:00am	2:00am	3:00am	4:00am	5:00am	6:00am	7:00am	8:00am	9:00am	10:00am	11:00am	12:00noon
04/01/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/02/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/03/08	0	0	0	0	0	0	0	0	0	O	0	0	0	0
04/04/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/05/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/06/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/08	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/09/08	0	0	0	0	0	0	0 .	0	0	0	0	0	0	0
04/10/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/11/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/12/08	0	0	0	. 0	0	0	0	0	0	0	0	0	0	0
04/13/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/14/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/15/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/16/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/17/08	00	0	0	0	0	0	0	0	0	0	0	0	0	0
04/18/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/19/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/20/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/08	3,480	0	0	0	0	0	0	0	0	0	0	0	0	0
04/23/08	6,840	0	0	0	0	0	0	0	0	0	0	0	0	0
04/24/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/25/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/26/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/27/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/28/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/29/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/30/08	<u> </u>	0	0	0	0	0	0	0	0	0	0	0	0	ļ - U
Well Total	10,320													
System Total														
Average	0.24													

	RW6S											
Date	1:00pm	2:00pm	3:00pm	4:00pm	5:00pm	6:00pm	7:00pm	8:00pm	9:00pm	10:00pm	11:00pm	
04/01/08	0	0	0	0	0	0	0	0	0	0	0	
04/02/08	0	0	0	0	0	0	0	0	0	0	0	
04/03/08	0	0	0	0	0 .	0	0	0	0	0	0	
04/04/08	0	0	0	0	0	0	0	0	0	0	0	
04/05/08	0	0	0	0	0	0	0	0	0	0	0	
04/06/08	0	0	0	0	0	0	0	0	0	0	0	
04/07/08	0	0	0	0	0	0	0	0	0	0	0	
04/08/08	0	0	0	0	0	0	0	0	0	0	0	
04/09/08	0	0	0	0	0	0	0	0	0	0	0	
04/10/08	0	0	0	0	0	0	0	0	0	0	0	
04/11/08	0	0	0	0	0	0	0	0	0	0	0	
04/12/08	0	0.	0	0	0	0	0	0	0	0	0	
04/13/08	0	0	0	0	0	. 0	0	0	0	0	0	
04/14/08	0	0	0	0	0	0	0	0	0	0	0	
04/15/08	0	0	0	0	0	0	0	0	0	0	0	
04/16/08	0	0	0	0	0	0	0	0	0	0	0	
04/17/08	0	0	0	0	0	0	0	0	0	0	0	
04/18/08	0	0	0	0	0	0	0	0	0	0	0	
04/19/08	0	0	0	0	0	0	0	0	0	0	0	
04/20/08	. 0	0	0	0	0	0	0	0	0	0	0	
04/21/08	0	0	0	0	0	0	0	0	0	0	0	
.04/22/08	0	0	0	58	0	0	0	0	0	0	0	
04/23/08	0	0	0	57	57	0	0 -	0	0	0	0	·
04/24/08	0	0	0	0	00	0	0	0	0	0	0	
04/25/08	0	0	0	0	0	0	0	0	0	0	0	
04/26/08	0	0	0	0	0	0	0	0	0	0	0	
04/27/08	0	0	0	0	0	0	0	0	0	0	0	
04/28/08	0	0	0	0	0	00	0	0	0	0	0	
04/29/08	0	0	0	0	0	0	0	0	0	0	0	A
04/30/08	0	0	0	0	0	0	0	0	0	0	0	
Well Total												
System Total				:								million and the state of the st
Average												

	LAYNE											1	1	
Date		12:00mid	1:00am	2:00am	3:00am	4:00am	5:00am	6:00am	7:00am	8:00am	9:00am	10:00am	11:00am	12:00noon
04/01/08	46,080	32	33	33	32	32	33	33	32	32	32	32	33	32
04/02/08	34,380	32	33	32	32	32	33	31	31	32	32	32	31	31
04/03/08	39,480	32	30	31	33	31	31	31	31	29	29	32	31	31
04/04/08	45,840	32	32	32	32	33	32	32	33	30	32	32	31	32
04/05/08	45,960	31	32	32	31	32	31	32	31	32	32	32	33	31
04/06/08	43,500	32	34	31	31	32	31	31	31	31	31	31	33	32
04/07/08	45,780	32	33	33	33	31	33	32	32	31	31	32	32	31
04/08/08	43,860	31	31	31	31	31	32	32	32	32	33	33	31	31
04/09/08	30,660	31	33	32	32	32	32	32	0	0	0 .	0	0	0
04/10/08	45,300	32 ·	31	31	32	32	31	31	32	32	32	32	31	31
04/11/08	45,180	31	32	31	32	32	32	32	32	31	31	30	31	31
04/12/08	45,660	31	31	32	32	32	32	31	32	31	33	33	31	31
04/13/08	43,860	32	31	0	32	30	32	31	32	31	31	32	32	32
04/14/08	45,480	31	31	33	33	30	32	32	31	31	31	32	32	32
04/15/08	38,100	32	32	31	31	32	32	32	31	32	32	32	31	0
04/16/08	45,360	32	30	32	31	31	30	32	31	31	31	32	31	34
04/17/08	28,440	32	31	0	0	0	0	0	31	0	0	0	0	31
04/18/08	40,260	33	32	32	32	33	32	31	31	33	31	0	0	0
04/19/08	43,680	32	31	31	31	31	32	31	33	0	31	31	32	31
04/20/08	43,980	32	32	33	33	32	32	32	31	32	31	32	33	32
04/21/08	20,580	31	30	31	31	31	31	32	30	31	0	0	0	0
04/22/08	45,240	32	32	31	31	32	30	32	33	31	31	32	31	32
04/23/08	43,320	30	31	31	31	32	31	31	32	31	30	33	31	32
04/24/08	32,220	32	32	31	32	31	32	32	31	33	31	31	33	32
04/25/08	45,660	33	31	32	31	31	32	31	32	31	31	32	31	32
04/26/08	45,000	31	32	31	30	30	31	31	31	30	30	32	32	31
04/27/08	44,580	30	31	31	32	31	30	30	30	31	30	30	31	33
04/28/08	39,660	32	31	32	32	32	32	32	32	30	30	0	0	0
04/29/08	44,520	30	30	30	30	30	31	32	31	32	31	30	31	32
04/30/08	43,920	30	30	30	31	31	31	31	30	30	32	32	30	30
Well Total	1,245,540													
System Total										-				
Average	28.83													

	LAYNE									1		
Date	1:00pm	2:00pm	3:00pm	4:00pm	5:00pm	6:00pm	7:00pm	8:00pm	9:00pm	10:00pm	11:00pm	
04/01/08	31	32	31	32	31	33	31	31	31	32	32	
04/02/08	32	32	33	31	0	0	0	0	0	0	31	
04/03/08	32	33	32	31	31	0	0	0	33	33	31	
04/04/08	32	31	32	32	31	31	32	32	31	32	33	
04/05/08	31	33	32	33	32	32	32	32	33	32	32	
04/06/08	31	32	31	32	31	32	30	33	30	32	0	
04/07/08	32	32	31	32	31	31	32	32	30	31	33	
04/08/08	31	34	0	31	31	33	31	33	31	32	33	
04/09/08	0	0	31	32	32	32	32	31	32	31	34	
04/10/08	32	32	31	30	33	31	32	30	31	32	31	
04/11/08	32	31	31	34	32	30	31	31	32	30	31	
04/12/08	33	31	32	31	31	31	32	32	32	31	33	
04/13/08	32	31	32	33	32	32	34	33	31	32	31	
04/14/08	32	31	32	32	32	31	31	32	32	32	30	
04/15/08	0	0	0	32	32	33	32	30	33	31	32	
04/16/08	31	32	30	33	32	31	31	31	32	32	33	
04/17/08	32	32	33	33	31	31	32	32	31	32	30	
04/18/08	30	33	31	33	32	31	32	32	32	33	32	
04/19/08	32	32	32	31	32	32	34	32	32	31	31	
04/20/08	32	32	32	31	32	31	0	32	32	31	31	
04/21/08	0	0	0	0	0	33	0	0	0	32	0	
04/22/08	33	32	31	31	31	30	32	. 31	31	30	32	
04/23/08	32	30	31	31	0	31	32	34	32	31	32	
04/24/08	31	31	30	32	0	0	0	0	0	0	0	
04/25/08	31	31	31	32	32	33	32	32	33	32	32	
04/26/08	31	32	32	31	32	32	32	31	32	31	32	
04/27/08	30	31	33	31	32	31	31	30	30	32	32	
04/28/08	32	30	32	31	32	32	31	32	31	31	32	
04/29/08	31	31	31	32	32	32	29	31	32	30	31	
04/30/08	30	31	31	30	31	30	30	30	30	31	30	
Well Total												
System Total												
Average		:										

	W9				T	l		T T				Ι		T
Date		12:00mid	1:00am	2:00am	3:00am	4:00am	5:00am	6:00am	7:00am	8:00am	9:00am	10:00am	11:00am	12:00noon
04/01/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/02/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/03/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/04/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/05/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/06/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/07/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/08/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/09/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/10/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/11/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/12/08	0	0	0	0 ~	0	0	0	0	0	0	0	0	0	0
04/13/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/14/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/15/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/16/08	0	0	0	0	0	0	0	.0	0	0	0	0	0	0
04/17/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/18/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/19/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/20/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/21/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/22/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/23/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/24/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/25/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/26/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/27/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/28/08	00	0	0	0	0	0	0	0	0	0	0	0	0	0
04/29/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04/30/08	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Well Total	0													
System Total														
Average	0.00													

	W9										
Date	1:00pm	2:00pm	3:00pm	4:00pm	5:00pm	6:00pm	7:00pm	8:00pm	9:00pm	10:00pm	11:00pm
04/01/08	0	0	0	0	o o	0	0	0	o o	0	0
04/02/08	0	0	0	0	0	0	0	0	0	0	0
04/03/08	0	0	0	0	0	0	0	0 ~	0	0	0
04/04/08	0	0	0	0	0	0	0	0	0	0	0
04/05/08	0	0	0	0	0	0	0	0	0	0	0
04/06/08	0	0	0	0	0	0	0	0	0	0	0
04/07/08	0	0	0	0	0	0	0	0	0	0	0
04/08/08	0	0	0	0	0	0	0	0	0	0	0
04/09/08	0	0	0	0	0	0	0	0	0	0	0
04/10/08	0	0	0	0	0	0	0	0	0	0	0
04/11/08	0	0	0	0	0	0	0	0	0	0	0
04/12/08	0	0	0	0	0	0	0	0	0	0	0
04/13/08	0	0	0	0	0	0	0	0	0	0	0
04/14/08	0	0	0	0	0	0	0	0	0	0	0
04/15/08	0	0	0	0	0	0	0	0	0	0	0
04/16/08	0	0	0	0	0	0	0	0	0	0	0
04/17/08	0	0	0	0	0	0	0	0	0	0	0
04/18/08	0	0	0 -	0	0	0	0	0	0	0	0
04/19/08	0	0	0	0	0	0	0	0	0	0	0
04/20/08	0	0	0	0	0	0	0	0	0	0	0
04/21/08	0	0	0	0	0	0	0	0	0	0	0
04/22/08	0	0	0	0	0	0	0	0	0	0	0
04/23/08	0	0	0	0	0	0	0	0	0	0	0
04/24/08	0	0	0	0	0	0	0	0	0	0	0
04/25/08	0	0	0	0	0	0	0	0	0	0	0
04/26/08	0	0	0	0	0	0	0	0	0	0	0
04/27/08	0	0	0	0	0	0	0	0	0	0	0
04/28/08	0	0	0	0	0	0	0	0	0	0	0
04/29/08	0	0	0	0	0	0	0	0	0	0	0
04/30/08	0	0	0	0	0	0	0	0	0	0	0
Well Total										***************************************	
System Total											
Average											

Extraction Well Downtime Summary February 2008 – April 2008

TABLE A-1 SHIELDALLOY METALLURGICAL CORPORATION NEWFIELD, NJ EXTRACTION WELL DOWNTIME SUMMARY

February 2008 Through April 2008

Date		Recover	y Well Dov (Hours)	vntime		Comments
(Down)	RIW2	RW6D	PW6S	LAYNE	W9	
2/1/2008	0	5	24	3	24	
2/2/2008	0	4	24	1	24	
2/3/2008	0	2	24	0	24	
2/4/2008	5	8	24	5	24	Weekly Clean-Up
2/5/2008	0	4	24	0	24	
2/6/2008	0	1	24	0	24	
2/7/2008	0	1	24	1	24	
2/8/2008	0	6	24	3	24	
2/9/2008	0	6	24	0	24	
2/10/2008	0	5	24	0	24	
2/11/2008	0	2	24	0	24	
2/12/2008	0	5	24	0	24	
2/13/2008	5	5	24	8	24	Weekly Clean-Up
2/14/2008	0	6	21	0	24	
2/15/2008	3	13	24	4	24	System Cycling On & Off
2/16/2008	0	16	11	3	24	
2/17/2008	0	5	24	1	24	
2/18/2008	5	9.66	24	5	24	Weekly Clean-Up
2/19/2008	0	5	24	0	24	
2/20/2008	0	6	20	0	24	
2/21/2008	0	7	24	0	24	
2/22/2008	0	14	19	1	24	
2/23/2008	0	2	24	0	24	
2/24/2008	0	5	24	0	24	
2/25/2008	5	6	24	. 9	24	Weekly Clean-Up
2/26/2008	0	24	24	0	24	
2/27/2008	1	23	23	1	24	
2/28/2008	4	24	24	5	24	No Operator Present (00:00 to 03:00)
2/29/2008	5	23	23	6	24	No Operator Present (00:00 to 03:00)
Average: (Hrs/Day)	1.14	8.37	23.07	1.93	24.00	(Note: Extraction well W9 offline since Feb. 2007 due to limited system capacity)

TABLE A-1 SHIELDALLOY METALLURGICAL CORPORATION NEWFIELD, NJ EXTRACTION WELL DOWNTIME SUMMARY February 2008 Through April 2008

Date		Recover	y Well Dov	vntime		Comments
(Down)			(Hours)			
	HIW2	F8946D	FINGS	AY/VE	979	
3/1/2008	8	24	24	8	24	
3/2/2008	0	24	24	2	24	
3/3/2008	10	18	19	5	24	Weekly Clean-Up
3/4/2008	0	12	12	12	24	
3/5/2008	0	4	12	12	24	
3/6/2008	4.5	8.5	24	5.5	24	
3/7/2008	1.33	4.33	24	1.33	24	
3/8/2008	1	2	24	1	24	Polymer Pump Problem
3/9/2008	0	3	24	0	24	
3/10/2008	12.5	13.5	24	19	24	
3/11/2008	0	1	24	0	24	
3/12/2008	7	8	24	7	24	
3/13/2008	1	8	24	20	24	Lost Prime - Out of Caustic
3/14/2008	11	13	24	16	24	No Caustic
3/15/2008	0	5	24	1	24	
3/16/2008	0	3	24	0	24	
3/17/2008	9	12	24	9	24	Weekly Clean-Up & Repairs
3/18/2008	0	1	24	0	24	
3/19/2008	0	3	24	2	24	
3/20/2008	0	2	24	0	24	
3/21/2008	0	3	24	0	24	
3/22/2008	0	5	24	0	24	
3/23/2008	0	5	24	0	24	
3/24/2008	16	16	24	16	24	Weekly Clean-Up
3/25/2008	24	24	24	24	24	Air Compressor Down
3/26/2008	24	24	24	24	24	Air Compressor Down
3/27/2008	24	24	24	24	24	Air Compressor Down
3/28/2008	11	12	24	15	24	Air Compressor Down
3/29/2008	1	6	24	1	24	
3/30/2008	0	4	24	1	24	
3/31/2008	4.5	4.5	24	4.5	24	
Average: (Hrs/Day)	5.48	9.58	23.06	7.43	24.00	(Note: Extraction well W9 offline since Feb. 2007 due to limited system capacity)

TABLE A-1 SHIELDALLOY METALLURGICAL CORPORATION NEWFIELD, NJ EXTRACTION WELL DOWNTIME SUMMARY February 2008 Through April 2008

Date		Recover	y Well Do		Comments	
(Down)	RIW2	RW6D	(Hours)	LAYNE	W9	
4/1/2008	0	2	24	0	24	
4/2/2008	0	2	24	6	24	
4/3/2008	0	2	24	3	24	
4/4/2008	0	2	24	0	24	
4/5/2008	0	4	24	0	24	
4/6/2008	1	2	24	1	24	
4/7/2008	0	1	24	0	24	
4/8/2008	0	2	24	1	24	
4/9/2008	9	10	24	9	24	Filter Inspection
4/10/2008	0	4	24	0	24	·
4/11/2008	0	3	24	0	24	
4/12/2008	0	4	24	0	24	
4/13/2008	0	0	24	1	24	
4/14/2008	0	2	24	0	24	
4/15/2008	4.5	4.5	24	4.5	24	No Operator Present (11:00 to 15:30)
4/16/2008	1	1	24	0	24	· · · · · · · · · · · · · · · · · · ·
4/17/2008	9.5	10.5	24	9.5	24	Recirculating
4/18/2008	0	8	24	3	24	_
4/19/2008	0	12	24	1	24	
4/20/2008	1	1	24	1	24	Recycling
4/21/2008	9	12	24	13	24	Weekly Clean-Up
4/22/2008	0	0	23	0	24	
4/23/2008	0	1	22	1	24	,
4/24/2008	7	8	24	7	24	
4/25/2008	0	2	24	0	24	
4/26/2008	0	1	24	0	24	
4/27/2008	0	2	24	0	24	
4/28/2008	3	3	24	3	24	Weekly Clean-Up
4/29/2008	0	1	24	0	24	
4/30/2008	0	0	24	0	24	
Average: (Hrs/Day)	1.50	3.57	23.90	2.13	24.00	(Note: Extraction well W9 offline since Feb. 2007 due to limited system capacity)

Treatment Plant Filter Press Waste Data February 2008 – April 2008

TABLE A-2 SHIELDALLOY METALLURGICAL CORPORATION NEWFIELD, NJ TREATMENT PLANT FILTER PRESS WASTE DATA February 2008 Through April 2008

Monito	Date Shipped	Quantity (Tons)		
March 1, 2008	to	February 29, 2008 March 31, 2008 April 30, 2008	02/09/2008 NA 04/18/2008	15.34 0.00 14.94
Total (Tons): Monthly Ave. (Tons):				30.28 10.09

NOTES:

NA - Not Applicable (No discharge during this monitoring period).

Waste disposal under New Jersey Pollution Discharge Elimination

System (NJPDES) permit number NJ0004103.

Monitoring Location: S16A-SQAR-Filter Press.

All residuals transferred to and received by the Gloucester County Solid

Waste Complex (facility #0816A).